

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	206	(548/466).CCLS.	US-PGPUB; USPAT; EPO; DERWENT	OR	OFF	2006/02/27 10:09
L2	1207	(514/414).CCLS.	US-PGPUB; USPAT; EPO; DERWENT	OR	OFF	2006/02/27 10:09
L3	2	("6645970").PN.	US-PGPUB; USPAT; EPO; DERWENT	OR	OFF	2006/02/27 10:10

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Welcome to STN International! Enter x:x

**LOGINID: SSSPTA1600RXA**

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* Welcome to STN International \* \* \* \* \* \* \* \* \* \* \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 DEC 05 CASREACT(R) - Over 10 million reactions available  
NEWS 4 DEC 14 2006 MeSH terms loaded in MEDLINE/LMEDLINE  
NEWS 5 DEC 14 2006 MeSH terms loaded for MEDLINE file segment of TOXCENTER  
NEWS 6 DEC 14 CA/CAPLUS to be enhanced with updated IPC codes  
NEWS 7 DEC 21 IPC search and display fields enhanced in CA/CAPLUS with the  
IPC reform  
NEWS 8 DEC 23 New IPC8 SEARCH, DISPLAY, and SELECT fields in USPATFULL/  
USPAT2  
NEWS 9 JAN 13 IPC 8 searching in IFIPAT, IFIUDB, and IFICDB  
NEWS 10 JAN 13 New IPC 8 SEARCH, DISPLAY, and SELECT enhancements added to  
INPADOC  
NEWS 11 JAN 17 Pre-1988 INPI data added to MARPAT  
NEWS 12 JAN 17 IPC 8 in the WPI family of databases including WPIFV  
NEWS 13 JAN 30 Saved answer limit increased  
NEWS 14 JAN 31 Monthly current-awareness alert (SDI) frequency  
added to TULSA  
NEWS 15 FEB 21 STN AnaVist, Version 1.1, lets you share your STN AnaVist  
visualization results  
NEWS 16 FEB 22 Status of current WO (PCT) information on STN  
NEWS 17 FEB 22 The IPC thesaurus added to additional patent databases on STN  
NEWS 18 FEB 22 Updates in EPFULL; IPC 8 enhancements added

NEWS EXPRESS FEBRUARY 15 CURRENT VERSION FOR WINDOWS IS V8.01a,  
CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005.  
V8.0 AND V8.01 USERS CAN OBTAIN THE UPGRADE TO V8.01a AT  
<http://download.cas.org/express/v8.0-Discover/>

NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS INTER General Internet Information  
NEWS LOGIN Welcome Banner and News Items  
NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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FILE 'HOME' ENTERED AT 10:57:20 ON 27 FEB 2006

```
=> fil reg
COST IN U.S. DOLLARS
SINCE FILE      TOTAL
ENTRY          SESSION
FULL ESTIMATED COST          0.21      0.21
```

FILE 'REGISTRY' ENTERED AT 10:57:31 ON 27 FEB 2006  
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
 COPYRIGHT (C) 2006 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file  
 provided by InfoChem.

STRUCTURE FILE UPDATES: 26 FEB 2006 HIGHEST RN 875270-69-2  
 DICTIONARY FILE UPDATES: 26 FEB 2006 HIGHEST RN 875270-69-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

Please note that search-term pricing does apply when  
 conducting SmartSELECT searches.

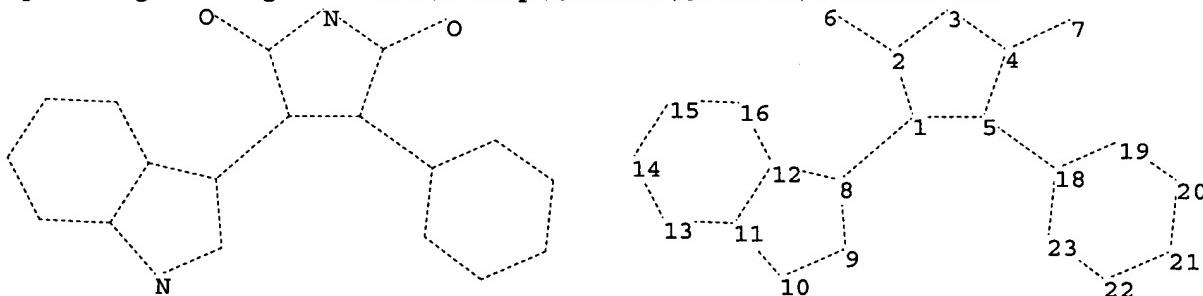
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*****
*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,      *
* effective March 20, 2005. A new display format, IDERL, is now       *
* available and contains the CA role and document type information. *
*****
*****
```

Structure search iteration limits have been increased. See HELP SLIMITS  
 for details.

REGISTRY includes numerically searchable data for experimental and  
 predicted properties as well as tags indicating availability of  
 experimental property data in the original document. For information  
 on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

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=>
Uploading C:\Program Files\Stnexp\Queries\QUERIES\10660442.str
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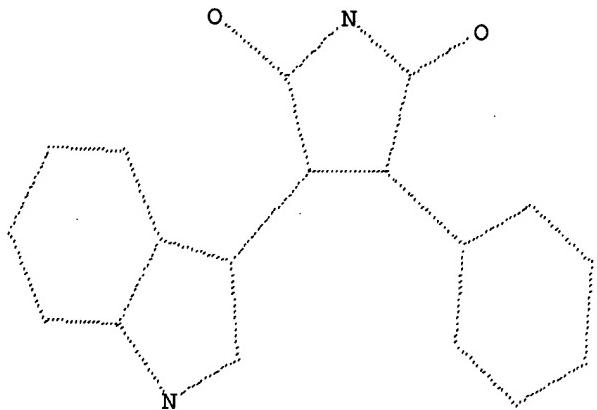
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chain nodes :
6 7
ring nodes :
1 2 3 4 5 8 9 10 11 12 13 14 15 16 18 19 20 21 22 23
chain bonds :
1-8 2-6 4-7 5-18
ring bonds :
1-2 1-5 2-3 3-4 4-5 8-9 8-12 9-10 10-11 11-12 11-13 12-16 13-14 14-15
15-16 18-19 18-23 19-20 20-21 21-22 22-23
```

exact/norm bonds :  
1-2 1-5 1-8 2-3 2-6 3-4 4-5 4-7 5-18 8-9 8-12 9-10 10-11 11-12 11-13  
12-16 13-14 14-15 15-16 18-19 18-23 19-20 20-21 21-22 22-23  
isolated ring systems :  
containing 1 : 8 :

Match level :  
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 7:CLASS 8:Atom 9:Atom 10:Atom  
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 18:Atom 19:Atom 20:Atom  
21:Atom 22:Atom 23:Atom

L1 STRUCTURE UPLOADED

=> d  
L1 HAS NO ANSWERS  
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 11  
SAMPLE SEARCH INITIATED 11:00:31 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 194 TO ITERATE

100.0% PROCESSED 194 ITERATIONS 29 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 3045 TO 4715  
PROJECTED ANSWERS: 257 TO 903

L2 29 SEA SSS SAM L1

=> s 11 full  
FULL SEARCH INITIATED 11:00:35 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 4178 TO ITERATE

100.0% PROCESSED 4178 ITERATIONS 709 ANSWERS  
SEARCH TIME: 00.00.01

L3 709 SEA SSS FUL L1

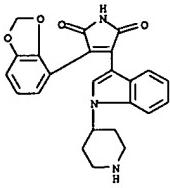
=> s 13 and caplus/lc

L4 49835185 CAPLUS/LC  
638 L3 AND CAPLUS/LC

=> s l3 not l4  
L5 71 L3 NOT L4

=> d 15 1-71

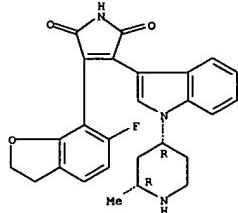
L5 ANSWER 1 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 793665-33-5 REGISTRY  
ED Entered STN: 07 Dec 2004  
CN 1H-Pyrrole-2,5-dione, 3-(1,3-benzodioxol-4-yl)-4-(1-(4-piperidinyl)-1H-indol-3-yl)- (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C24 H21 N3 O4  
CI COM  
SR CA



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

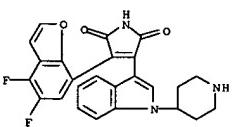
L5 ANSWER 2 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 792185-23-0 REGISTRY  
ED Entered STN: 05 Dec 2004  
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-2,3-dihydro-7-benzofuranyl)-4-[1-[(2R,4R)-2-methyl-4-piperidinyl]-1H-indol-3-yl], rel- (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C26 H24 F N3 O3  
CI COM  
SR CA

Relative stereochemistry.



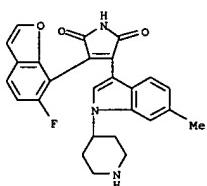
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L5 ANSWER 3 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 791583-98-7 REGISTRY  
ED Entered STN: 02 Dec 2004  
CN 1H-Pyrrole-2,5-dione,  
3-(4,5-difluoro-7-benzofuranyl)-4-[1-(4-piperidinyl)-  
1H-indol-3-yl]- (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C25 H19 F2 N3 O3  
CI COM  
SR CA



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L5 ANSWER 4 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 791060-25-8 REGISTRY  
ED Entered STN: 01 Dec 2004  
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[6-methyl-1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C26 H22 F N3 O3  
CI COM  
SR CA

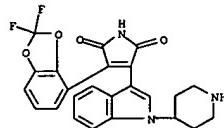


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L5 ANSWER 5 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 790656-70-1 REGISTRY  
ED Entered STN: 30 Nov 2004  
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[1-(3-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C25 H20 F N3 O3  
CI COM  
SR CA

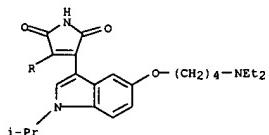


L5 ANSWER 6 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 788820-02-0 REGISTRY  
ED Entered STN: 26 Nov 2004  
CN 1H-Pyrrole-2,5-dione, 3-(2,2-difluoro-1,3-benzodioxol-4-yl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C24 H19 F2 N3 O4  
CI COM  
SR CA

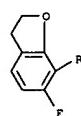
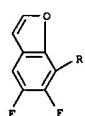
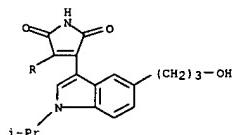


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L5 ANSWER 7 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 788155-08-8 REGISTRY  
ED Entered STN: 25 Nov 2004  
CN 1H-Pyrrole-2,5-dione, 3-[5-[4-(diethylamino)butoxy]-1-(1-methylethyl)-1H-indol-3-yl]-4-(5,6-difluoro-7-benzofuranyl)- (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C31 H33 F2 N3 O4  
CI COM  
SR CA

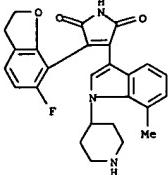


L5 ANSWER 8 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 787546-43-4 REGISTRY  
ED Entered STN: 24 Nov 2004  
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-2,3-dihydro-7-benzofuranyl)-4-[5-(3-hydroxypropyl)-1-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C26 H25 F N2 O4  
CI COM  
SR CA

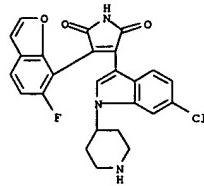


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

LS ANSWER 9 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 786639-55-2 REGISTRY  
 ED Entered STN: 23 Nov 2004  
 CN 1H-Pyrrole-2,5-dione,  
 3-([6-fluoro-2,3-dihydro-7-benzofuranyl]-1H-indol-3-yl)-4-(1-methyl-1-(4-piperidinyl)-1H-indol-3-yl)- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C26 H24 F N3 O3  
 CI COM  
 SR CA



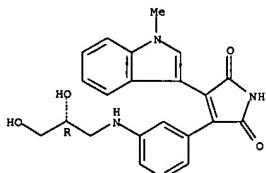
LS ANSWER 10 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 785774-30-3 REGISTRY  
 ED Entered STN: 22 Nov 2004  
 CN 1H-Pyrrole-2,5-dione, 3-[6-chloro-1-(4-piperidinyl)-1H-indol-3-yl]-4-(6-fluoro-7-benzofuranyl)- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C25 H19 Cl F N3 O3  
 CI COM  
 SR CA



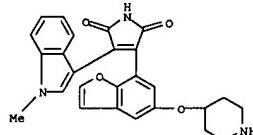
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

LS ANSWER 11 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 785768-96-9 REGISTRY  
 ED Entered STN: 22 Nov 2004  
 CN 1H-Pyrrole-2,5-dione, 3-[3-[(2R)-2,3-dihydroxypropyl]amino]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C22 H21 N3 O4  
 CI COM  
 SR CA

Absolute stereochemistry.



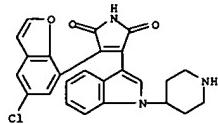
LS ANSWER 12 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 785046-11-9 REGISTRY  
 ED Entered STN: 21 Nov 2004  
 CN 1H-Pyrrole-2,5-dione,  
 3-((1-methyl-1H-indol-3-yl)-4-[5-(4-piperidinyloxy)-7-benzofuranyl]- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C26 H23 N3 O4  
 CI COM  
 SR CA



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

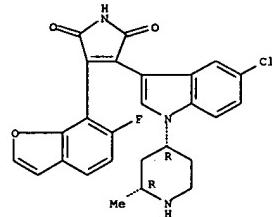
L5 ANSWER 13 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 784137-30-0 REGISTRY  
ED Entered STN: 19 Nov 2004  
CN 1H-Pyrrole-2,5-dione,  
3-(5-chloro-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]-(9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C25 H20 Cl N3 O3  
CI COM  
SR CA



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L5 ANSWER 14 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 783302-38-5 REGISTRY  
ED Entered STN: 18 Nov 2004  
CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-1-((2R,4R)-2-methyl-4-piperidinyl)-1H-indol-3-yl]-4-(6-fluoro-7-benzofuranyl)-, rel- (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C26 H21 Cl F N3 O3  
CI COM  
SR CA

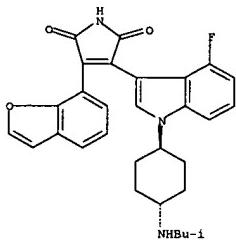
Relative stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L5 ANSWER 15 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 782447-56-7 REGISTRY  
ED Entered STN: 16 Nov 2004  
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[4-fluoro-1-[trans-4-[(2-methylpropyl)amino]cyclohexyl]-1H-indol-3-yl]-(9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C30 H30 F N3 O3  
CI COM  
SR CA

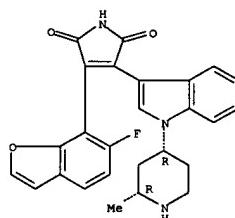
Relative stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

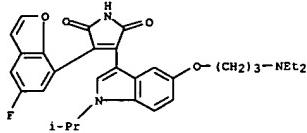
L5 ANSWER 16 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 781612-18-8 REGISTRY  
ED Entered STN: 16 Nov 2004  
CN 1H-Pyrrole-2,5-dione,  
3-(6-fluoro-7-benzofuranyl)-4-[1-((2R,4R)-2-methyl-4-piperidinyl)-1H-indol-3-yl]-, rel- (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C26 H22 F N3 O3  
CI COM  
SR CA

Relative stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

LS ANSWER 17 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 780035-96-3 REGISTRY  
 ED Entered STN: 14 Nov 2004  
 CN 1H-Pyrrole-2,5-dione,  
 3-[5-[3-(diethylamino)propoxy]-1-(1-methylethyl)-1H-indol-3-yl]-4-(5-fluoro-7-benzofuranyl)- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C30 H32 F N3 O4  
 CI COM  
 SR CA



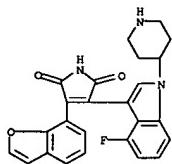
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

LS ANSWER 18 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 779322-67-1 REGISTRY  
 ED Entered STN: 12 Nov 2004  
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 3-[6-fluoro-7-benzofuranyl]-4-[1-[3-(hydroxymethyl)-4-piperidinyl]-1H-indol-3-yl]- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C26 H22 F N3 O4  
 CI COM  
 SR CA



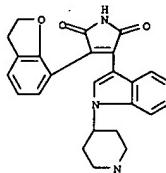
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LS ANSWER 19 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 778573-35-6 REGISTRY  
 ED Entered STN: 11 Nov 2004  
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 3-(7-benzofuranyl)-4-(4-fluoro-1-(4-piperidinyl)-1H-indol-3-yl)- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C25 H20 F N3 O3  
 CI COM  
 SR CA



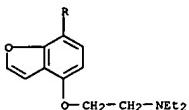
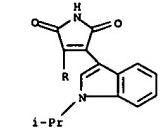
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LS ANSWER 20 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 777851-60-2 REGISTRY  
 ED Entered STN: 10 Nov 2004  
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 3-[2,3-dihydro-7-benzofuranyl]-4-[1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C25 H23 N3 O3  
 CI COM  
 SR CA



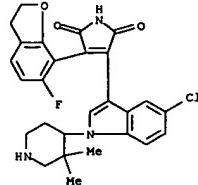
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L5 ANSWER 21 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 776292-36-5 REGISTRY  
ED Entered STN: 08 Nov 2004  
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FS 3D CONCORD  
MF C29 H31 N3 O4  
CI COM  
SR CA



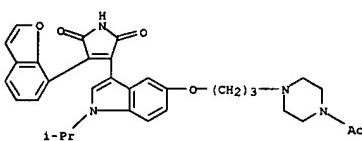
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L5 ANSWER 22 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 775577-07-6 REGISTRY  
ED Entered STN: 07 Nov 2004  
CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-1-(3,3-dimethyl-4-piperidinyl)-1H-indol-3-yl]-4-(6-fluoro-2,3-dihydro-7-benzofuranyl)- (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C27 H25 Cl F N3 O3  
CI COM  
SR CA



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

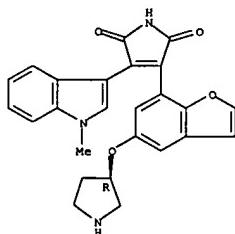
L5 ANSWER 23 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 775282-73-0 REGISTRY  
ED Entered STN: 05 Nov 2004  
CN Piperazine,  
1-acetyl-4-[3-[(3-(4-(7-benzofuranyl)-2,5-dihydro-2,5-dioxo-1H-pyrrol-3-yl)-1-(1-methylethyl)-1H-indol-5-yl)oxy]propyl]- (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C32 H34 N4 O5  
CI COM  
SR CA



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L5 ANSWER 24 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 774536-05-9 REGISTRY  
ED Entered STN: 04 Nov 2004  
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[5-((3R)-3-pyrrolidinyloxy)-7-benzofuranyl]- (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C25 H21 N3 O4  
CI COM  
SR CA

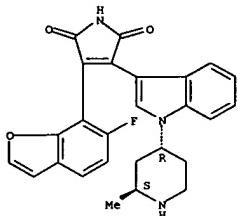
Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

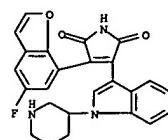
L5 ANSWER 25 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 773052-74-7 REGISTRY  
ED Entered STN: 01 Nov 2004  
CN 1H-Pyrrole-2,5-dione,  
3-(6-fluoro-7-benzofuranyl)-4-[1-((2R,4S)-2-methyl-4-piperidinyl)-1H-indol-3-yl]-, rel- (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C26 H22 F N3 O3  
CI COM  
SR CA

Relative stereochemistry.



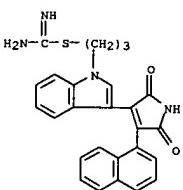
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L5 ANSWER 26 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 772336-96-6 REGISTRY  
ED Entered STN: 31 Oct 2004  
CN 1H-Pyrrole-2,5-dione,  
3-(5-fluoro-7-benzofuranyl)-4-[1-(3-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C25 H20 F N3 O3  
CI COM  
SR CA



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L5 ANSWER 27 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 772314-22-4 REGISTRY  
ED Entered STN: 29 Oct 2004  
CN Carbamimidothioic acid,  
3-[3-(2,5-dihydro-4-(1-naphthalenyl)-2,5-dioxo-1H-pyrrrol-3-yl)-1H-indol-1-yl]propyl ester (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C26 H22 N4 O2 S  
CI COM  
SR CA



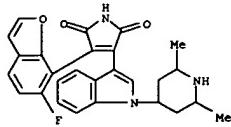
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L5 ANSWER 28 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 771473-49-5 REGISTRY  
ED Entered STN: 28 Oct 2004  
CN 1H-Pyrrole-2,5-dione,  
3-[1-(7-azaspiro[4.5]dec-10-yl)-1H-indol-3-yl]-4-(6-fluoro-2,3-dihydro-7-benzofuranyl)- (9CI) (CA INDEX NAME)  
MF C29 H28 F N3 O3  
CI COM  
SR CA



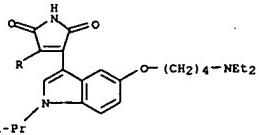
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

LS ANSWER 29 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 770707-11-4 REGISTRY  
 ED Entered STN: 28 Oct 2004  
 CN 1H-Pyrrole-2,5-dione, 3-[1-(2,6-dimethyl-4-piperidinyl)-1H-indol-3-yl]-4-(6-fluoro-7-benzofuranyl)- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C27 H24 F N3 O3  
 CI COM  
 SR CA

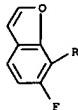


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

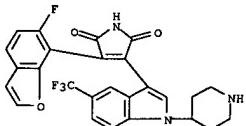
LS ANSWER 30 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 769918-90-3 REGISTRY  
 ED Entered STN: 27 Oct 2004  
 CN 1H-Pyrrole-2,5-dione, 3-[5-[4-(diethylamino)butoxy]-1-(1-methylethyl)-1H-indol-3-yl]-4-(6-fluoro-7-benzofuranyl)- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C31 H34 F N3 O4  
 CI COM  
 SR CA



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

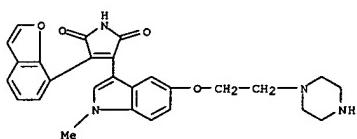


LS ANSWER 31 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 767627-34-9 REGISTRY  
 ED Entered STN: 24 Oct 2004  
 CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[1-(4-piperidinyl)-5-(trifluoromethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C26 H19 F4 N3 O3  
 CI COM  
 SR CA



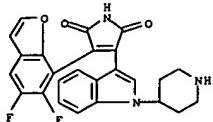
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

LS ANSWER 32 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 766506-12-1 REGISTRY  
 ED Entered STN: 21 Oct 2004  
 CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[1-methyl-5-[2-(1-piperazinyl)ethoxy]-1H-indol-3-yl]- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C27 H26 N4 O4  
 CI COM  
 SR CA



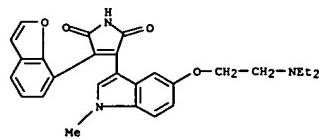
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

LS ANSWER 33 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 765897-46-9 REGISTRY  
 ED Entered STN: 20 Oct 2004  
 CN 1H-Pyrrole-2,5-dione, 3-(5,6-difluoro-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C25 H19 F2 N3 O3  
 CI COM  
 SR CA



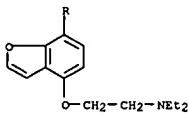
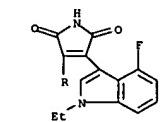
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

LS ANSWER 34 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 764645-67-2 REGISTRY  
 ED Entered STN: 18 Oct 2004  
 CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[5-(2-(diethylamino)ethoxy)-1-methyl-1H-indol-3-yl]- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C27 H27 N3 O4  
 CI COM  
 SR CA



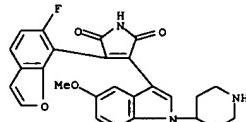
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

LS ANSWER 35 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 763924-38-5 REGISTRY  
 ED Entered STN: 17 Oct 2004  
 CN 1H-Pyrrole-2,5-dione, 3-[4-(2-(diethylamino)ethoxy)-7-benzofuranyl]-4-(1-ethyl-4-fluoro-1H-indol-3-yl)- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C28 H28 F N3 O4  
 CI COM  
 SR CA



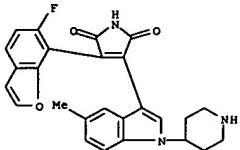
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

LS ANSWER 36 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 763081-08-9 REGISTRY  
 ED Entered STN: 15 Oct 2004  
 CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[5-methoxy-1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C26 H22 F N3 O4  
 CI COM  
 SR CA

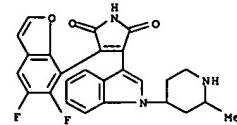


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

LS ANSWER 37 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 762238-11-9 REGISTRY  
 ED Entered STN: 14 Oct 2004  
 CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[5-methyl-1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C26 H22 F N3 O3  
 CI COM  
 SR CA

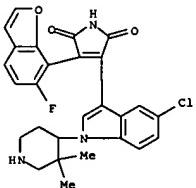


LS ANSWER 38 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 761398-62-3 REGISTRY  
 ED Entered STN: 13 Oct 2004  
 CN 1H-Pyrrole-2,5-dione, 3-(5,6-difluoro-7-benzofuranyl)-4-[1-(2-methyl-4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C26 H21 F2 N3 O3  
 CI COM  
 SR CA

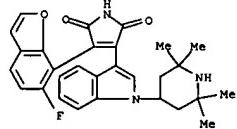


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

LS ANSWER 39 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 760943-03-1 REGISTRY  
 ED Entered STN: 12 Oct 2004  
 CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-1-(3,3-dimethyl-4-piperidinyl)-1H-indol-3-yl]-4-(6-fluoro-7-benzofuranyl)- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C27 H23 Cl F N3 O3  
 CI COM  
 SR CA



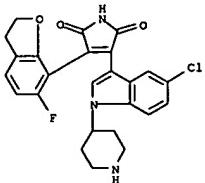
LS ANSWER 40 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 760171-32-2 REGISTRY  
 ED Entered STN: 11 Oct 2004  
 CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[1-(2,2,6,6-tetramethyl-4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C29 H28 F N3 O3  
 CI COM  
 SR CA



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

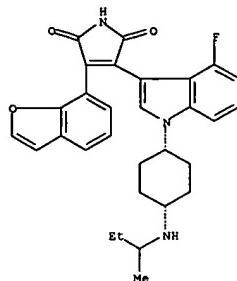
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L5 ANSWER 41 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 759455-70-4 REGISTRY  
ED Entered STN: 10 Oct 2004  
CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-1-(4-piperidinyl)-1H-indol-3-yl]-4-(6-fluoro-2,3-dihydro-7-benzofuranyl)- (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C25 H21 Cl F N3 O3  
CI COM  
SR CA



L5 ANSWER 42 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 756815-95-9 REGISTRY  
ED Entered STN: 05 Oct 2004  
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[4-fluoro-1-[cis-4-((1-methylpropyl)amino)cyclohexyl]-1H-indol-3-yl]- (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C30 H30 F N3 O3  
CI COM  
SR CA

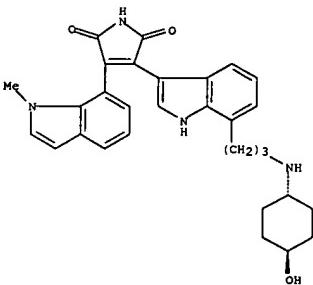
Relative stereochemistry.



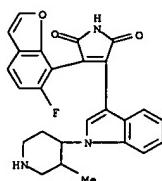
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L5 ANSWER 43 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 756811-11-7 REGISTRY  
ED Entered STN: 05 Oct 2004  
CN 1H-Pyrrole-2,5-dione, 3-[7-[3-[(trans-4-hydroxycyclohexyl)amino]propyl]-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C30 H32 N4 O3  
CI COM  
SR CA

Relative stereochemistry.



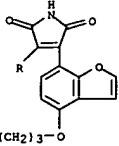
L5 ANSWER 44 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 755751-12-3 REGISTRY  
ED Entered STN: 01 Oct 2004  
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[1-(3-methyl-4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C26 H22 F N3 O3  
CI COM  
SR CA



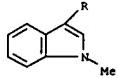
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L5 ANSWER 45 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 754975-54-7 REGISTRY  
ED Entered STN: 01 Oct 2004  
CN 1H-Pyrrole-2,5-dione,  
3-(4-(3-(dimethylamino)propoxy)-7-benzofuranyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C26 H25 N3 O4  
CI COM  
SR CA

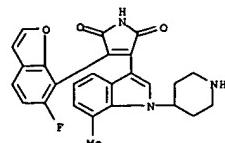


Me<sub>2</sub>N—(CH<sub>2</sub>)<sub>3</sub>—O

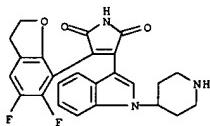


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L5 ANSWER 46 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 754183-57-8 REGISTRY  
ED Entered STN: 30 Sep 2004  
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[7-methyl-1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C26 H22 F N3 O3  
CI COM  
SR CA



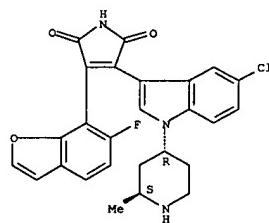
L5 ANSWER 47 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 752200-19-4 REGISTRY  
ED Entered STN: 27 Sep 2004  
CN 1H-Pyrrole-2,5-dione,  
3-(5,6-difluoro-2,3-dihydro-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C25 H21 F2 N3 O3  
CI COM  
SR CA



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

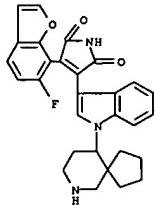
L5 ANSWER 48 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 750568-71-9 REGISTRY  
ED Entered STN: 24 Sep 2004  
CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-1-((2R,4S)-2-methyl-4-piperidinyl)-1H-indol-3-yl]-4-(6-fluoro-7-benzofuranyl)-, rel- (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C26 H21 Cl F N3 O3  
CI COM  
SR CA

Relative stereochemistry.

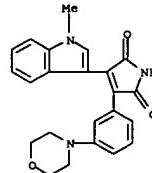


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

LS ANSWER 49 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 749205-95-6 REGISTRY  
 ED Entered STN: 22 Sep 2004  
 CN 1H-Pyrrole-2,5-dione,  
 3-[1-(7-azaspiro[4.5]dec-10-yl)-1H-indol-3-yl]-4-(6-  
 fluoro-7-benzofuranyl)- (9CI) (CA INDEX NAME)  
 MF C29 H26 F N3 O3  
 CI COM  
 SR CA



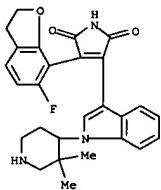
LS ANSWER 50 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 749200-67-7 REGISTRY  
 ED Entered STN: 22 Sep 2004  
 CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[3-(4-  
 morpholinyl)phenyl]- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C23 H21 N3 O3  
 CI COM  
 SR CA



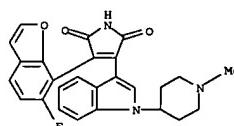
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

LS ANSWER 51 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 748130-13-4 REGISTRY  
 ED Entered STN: 20 Sep 2004  
 CN 1H-Pyrrole-2,5-dione, 3-[1-(3,3-dimethyl-4-piperidinyl)-1H-indol-3-yl]-4-  
 (6-fluoro-2,3-dihydro-7-benzofuranyl)- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C27 H26 F N3 O3  
 CI COM  
 SR CA



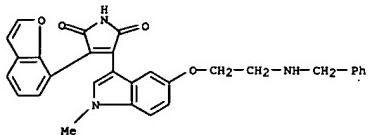
LS ANSWER 52 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 747407-76-7 REGISTRY  
 ED Entered STN: 19 Sep 2004  
 CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[1-(1-methyl-4-  
 piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C26 H22 F N3 O3  
 CI COM  
 SR CA



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

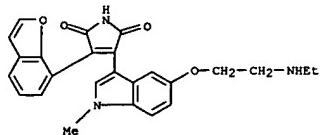
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

LS ANSWER 53 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 744195-13-9 REGISTRY  
 ED Entered STN: 14 Sep 2004  
 CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[1-methyl-5-{2-[(phenylmethyl)amino]ethoxy}-1H-indol-3-yl]- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C30 H25 N3 O4  
 CI COM  
 SR CA



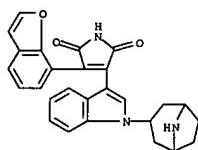
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

LS ANSWER 54 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 743417-58-5 REGISTRY  
 ED Entered STN: 13 Sep 2004  
 CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[5-{2-(ethylamino)ethoxy}-1-methyl-1H-indol-3-yl]- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C25 H23 N3 O4  
 CI COM  
 SR CA



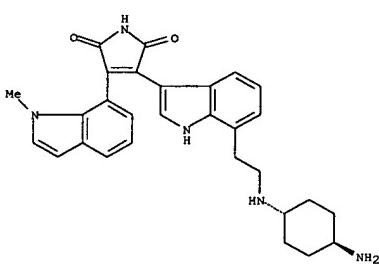
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

LS ANSWER 55 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 742693-19-2 REGISTRY  
 ED Entered STN: 12 Sep 2004  
 CN 1H-Pyrrole-2,5-dione, 3-[1-(3-endo)-8-azabicyclo[3.2.1]oct-3-yl-1H-indol-3-yl]-4-(7-benzofuranyl)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C27 H23 N3 O3  
 CI COM  
 SR CA



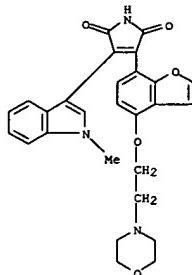
LS ANSWER 56 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 742051-44-1 REGISTRY  
 ED Entered STN: 10 Sep 2004  
 CN 1H-Pyrrole-2,5-dione, 3-[7-{2-[(trans-4-aminocyclohexyl)amino]ethyl}-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C29 H31 N5 O2  
 CI COM  
 SR CA

Relative stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

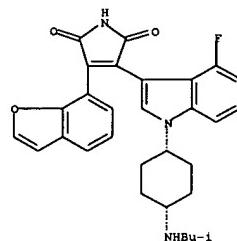
LS ANSWER 57 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 741669-01-2 REGISTRY  
 ED Entered STN: 09 Sep 2004  
 CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-(4-[2-(4-morpholinyl)ethoxy]-7-benzofuranyl)- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C27 H25 N3 O5  
 CI COM  
 SR CA



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

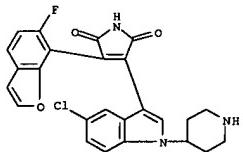
LS ANSWER 58 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 741247-70-1 REGISTRY  
 ED Entered STN: 08 Sep 2004  
 CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-(4-fluoro-1-[cis-4-[(2-methylpropyl)amino]cyclohexyl]-1H-indol-3-yl)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C30 H30 F N3 O3  
 CI COM  
 SR CA

Relative stereochemistry.



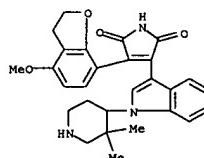
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

LS ANSWER 59 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 736925-23-8 REGISTRY  
 ED Entered STN: 01 Sep 2004  
 CN 1H-Pyrrole-2,5-dione, 3-(5-chloro-1-(4-piperidinyl)-1H-indol-3-yl)-4-(6-fluoro-7-benzofuranyl)- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C25 H19 Cl F N3 O3  
 CI COM  
 SR CA



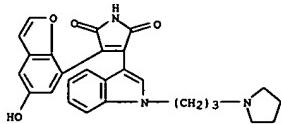
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

LS ANSWER 60 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 736133-12-3 REGISTRY  
 ED Entered STN: 31 Aug 2004  
 CN 1H-Pyrrole-2,5-dione, 3-(2,3-dihydro-4-methoxy-7-benzofuranyl)-4-[1-(3,3-dimethyl-4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C28 H29 N3 O4  
 CI COM  
 SR CA



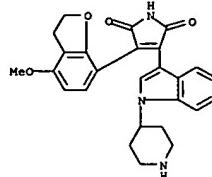
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

LS ANSWER 61 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 733736-87-3 REGISTRY  
 ED Entered STN: 27 Aug 2004  
 CN 1H-Pyrrole-2,5-dione, 3-(5-hydroxy-7-benzofuranyl)-4-[1-(3-(1-pyrrolidinyl)propyl]-1H-indol-3-yl]- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C27 H25 N3 O4  
 CI COM  
 SR CA



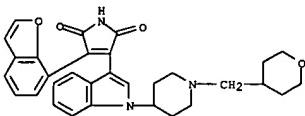
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

LS ANSWER 62 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 730936-53-5 REGISTRY  
 ED Entered STN: 22 Aug 2004  
 CN 1H-Pyrrole-2,5-dione, 3-(2,3-dihydro-4-methoxy-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C26 H25 N3 O4  
 CI COM  
 SR CA



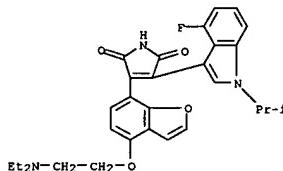
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

LS ANSWER 63 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 729557-73-7 REGISTRY  
 ED Entered STN: 21 Aug 2004  
 CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[1-(1-[(tetrahydro-2H-pyran-4-yl)methyl]-4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C31 H31 N3 O4  
 CI COM  
 SR CA



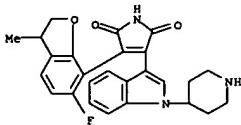
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

LS ANSWER 64 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 726125-30-0 REGISTRY  
 ED Entered STN: 12 Aug 2004  
 CN 1H-Pyrrole-2,5-dione, 3-[4-(2-(diethylamino)ethoxy)-7-benzofuranyl]-4-[4-fluoro-1-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C29 H30 F N3 O4  
 CI COM  
 SR CA



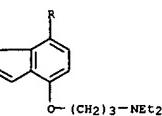
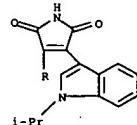
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

LS ANSWER 65 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 723241-84-7 REGISTRY  
 ED Entered STN: 05 Aug 2004  
 CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-2,3-dihydro-3-methyl-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C26 H24 F N3 O3  
 CI COM  
 SR CA



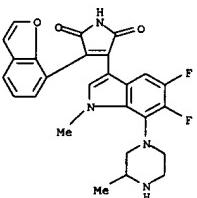
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

LS ANSWER 66 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 698345-94-7 REGISTRY  
 ED Entered STN: 23 Jun 2004  
 CN 1H-Pyrrole-2,5-dione, 3-[4-(diethylamino)propoxy]-7-benzofuranyl-4-[1-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C30 H33 N3 O4  
 CI COM  
 SR CA



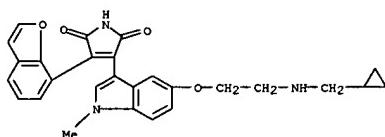
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

LS ANSWER 67 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 691847-94-6 REGISTRY  
 ED Entered STN: 11 Jun 2004  
 CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[5,6-difluoro-1-methyl-7-(3-methyl-1-piperazinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C26 H22 F2 N4 O3  
 CI COM  
 SR CA



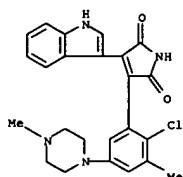
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

LS ANSWER 68 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 688000-27-3 REGISTRY  
 ED Entered STN: 31 May 2004  
 CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[5-[2-[(cyclopropylmethyl)amino]ethoxy]-1-methyl-1H-indol-3-yl]- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C27 H25 N3 O4  
 CI COM  
 SR CA



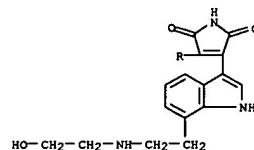
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

LS ANSWER 69 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 611234-10-7 REGISTRY  
 ED Entered STN: 31 Oct 2003  
 CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-3-methyl-5-(4-methyl-1-piperazinyl)phenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C24 H23 Cl N4 O2  
 CI COM  
 SR CA



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

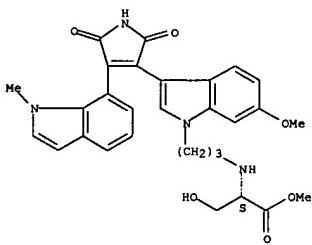
LS ANSWER 70 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 408355-96-4 REGISTRY  
 ED Entered STN: 26 Apr 2002  
 CN 1H-Pyrrole-2,5-dione,  
 3-(7-[2-[(2-hydroxyethyl)amino]ethyl]-1H-indol-3-yl)-  
 4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C25 H24 N4 O3  
 CI COM  
 SR CA



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

LS ANSWER 71 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 408355-80-6 REGISTRY  
 ED Entered STN: 26 Apr 2002  
 CN L-Serine, N-[3-[3-2,5-dihydro-4-(1-methyl-1H-indol-7-yl)-2,5-dioxo-1H-pyrol-3-yl]-6-methoxy-1H-indol-1-yl]propyl], methyl ester (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C29 H30 N4 O6  
 CI COM  
 SR CA

Absolute stereochemistry. Rotation (+).



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

=> fil caplus		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
FULL ESTIMATED COST	ENTRY	SESSION
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FILE LAST UPDATED: 26 Feb 2006 (20060226/ED)

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=> d his

ACCESSION NUMBER: 2006:53816 CAPLUS

DOCUMENT NUMBER: 144:143032

TITLE: Modulation of glycogen synthase kinase-3β (GSK-3β) and method of treating proliferative disorders

INVENTOR(S): Yu, Qiang

PATENT ASSIGNEE(S): Agency for Science, Technology and Research, Singapore

SOURCE: PCT Int. Appl., 67 pp.

DOCUMENT TYPE: Patent

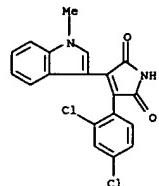
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006006939	A1	20060119	WO 2005-SG223	20050708
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GN, GO, GW, HL, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TU, TM				
PRIORITY APPLN. INFO.: US 2004-586296P P 20040709				

- AB The invention provides methods and uses for promoting cell death, when combined with chemotherapeutic agents, in an abnormally proliferating cell, and for treating a proliferative disorder in a subject, which methods and uses involve contacting a cell with, or administering to a subject an agent that modulates glycogen synthase kinase-3β activity in a cell that is being treated with a chemotherapeutic agent.
- IT 280744-09-4, SB-216763  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(glycogen synthase kinase-3β modulators in treatment of proliferative disorders)
- RN 280744-09-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ACCESSION NUMBER: 2005:1290025 CAPLUS

DOCUMENT NUMBER: 144:36329

TITLE: Thiazole compounds as PPAR modulators, their preparation, pharmaceutical compositions, and use in therapy

INVENTOR(S): Epple, Robert; Cow, Christopher; Xie, Yongping; Wang, Xing; Russo, Ross; Azimioara, Mihai; Saez, Enrique  
PATENT ASSIGNEE(S): IRM LLC, Bermuda  
SOURCE: PCT Int. Appl., 187 pp.  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005116000	A1	20051208	WO 2005-US18167	20050524
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, CZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, HL, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.: US 2004-574137P P 20040524 US 2005-648985P P 20050131				

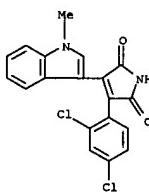
OTHER SOURCE(S): MARPAT 144:36329  
GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The invention relates to thiazole compds. of formula I, which are modulators of peroxisome proliferator-activated receptors (PPAR), particularly PPAR $\delta$ . In compds. I, p is 0-3; L is selected from -XO $X'$ , -XSO $X'$  or -XCO $X'$ O, where m is 0-2 and X is a bond or (un)substituted Cl-4 alkylene; R1 is selected from halo, Cl-6 alkyl, Cl-6 alkoxy, Cl-6 hydroxalkyl, Cl-6 haloalkyl, Cl-6 haloalkoxy, (un)substituted C6-10 aryl, (un)substituted C5-10 heteroaryl, (un)substituted C3-12 cycloalkyl, and (un)substituted C3-8 heterocycl; R2 is -XO $X'$ O $X''$  or -XCO $X'$ O $X''$ , where X is as defined previously and R5 is H or Cl-6 alkyl; and R3 and R4 are independently selected from R6 and R6Y, where R6 is (un)substituted C3-12 cycloalkyl, (un)substituted C3-8 heterocycl, (un)substituted C6-10 aryl, and (un)substituted C5-13 heterocycl, and Y is selected from Cl-6 alkylene, C2-6 alkenylene, C2-6 alkynylene, -C(O)N(R5)-, and -OX-, where X and R5 are as defined previously, or R3 and R4, together with the atoms to which they are attached, form fused bi- or tricyclic C5-14 heteroaryl; including pharmaceutically acceptable salts, hydrates, solvates, isomers, and prodrugs thereof. The invention also relates to the preparation of I,

L6 ANSWER 2 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
pharmaceutical compns. comprising a therapeutically effective amt. of compd. I in combination with one or more pharmaceutically acceptable excipients, as well as to the use of the compns. to treat or prevent diseases or disorders assoccd. with PPAR activity. Cyclocondensation of 2-bromo-4'-methoxyacetophenone with thiacetamide followed by bromination,

demethylation, and alkylation with iso-Pr iodide gave bromothiazole II, which was brominated and substituted with phenol III (prep. in 3 steps from 4-hydroxy-3-methylacetophenone given) to give thiazole IV. Compd.

IV underwent Suzuki coupling with 4-(trifluoromethoxy)phenylboronic acid and after hydrolysis to give thiazole V. Most preferred compds. of the invention express an EC50 value for PPAR $\delta$  of less than 100 nM. The compds. of the invention are at least 100-fold selective for PPAR $\delta$  over PPAR $\alpha$ .IT 280744-09-4, SB-216763  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(preparation of thiazole compds. as PPAR modulators and their use for treatment and prevention of diseases associated with PPAR $\delta$  activity)RN 280744-09-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ACCESSION NUMBER: 2005:1289979 CAPLUS

DOCUMENT NUMBER: 144:36326

TITLE: Oxazole compounds as PPAR modulators, their preparation, pharmaceutical compositions, and use in therapy

INVENTOR(S): Epple, Robert; Xie, Yongping; Wang, Xing; Cow, Christopher; Russo, Ross

PATENT ASSIGNEE(S): ITRM LLC, Bermuda

SOURCE: PCT Int. Appl., 75 pp.

CODEN: PIIXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 200516016	A1	20051208	WO 2005-US18166	20050524
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, T2, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.:		US 2004-574137P	P	20040524
		US 2005-649671P	P	20050202

OTHER SOURCE(S): MARPAT 144:36326  
GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The invention relates to oxazole compds. of formula I, which are modulators of peroxisome proliferator-activated receptors (PPAR), particularly PPAR<sub>5</sub>. In compds. I, p is 0-3; L is selected from -XOX-, -XSO(O)R<sub>1</sub>X- and -XS(O)mR<sub>2</sub>X-, where m is 0-2 and X is a bond or (un)substituted C1-4 alkylene; R<sub>1</sub> is selected from halo, Cl-6 alkyl, Cl-6 alkoxy, Cl-6 hydroxalkyl, Cl-6 haloalkyl, Cl-6 haloalkoxy, (un)substituted C6-10 aryl, (un)substituted C3-10 heterocycl; R<sub>2</sub> is -XOCOIS or -XCO2R<sub>5</sub>, where X is as defined previously and R<sub>5</sub> is H or Cl-6 alkyl; and R<sub>3</sub> and R<sub>4</sub> are independently selected from R<sub>6</sub> and R<sub>6Y</sub>, where R<sub>6</sub> is (un)substituted C3-12 cycloalkyl, (un)substituted C3-8 heterocyclyl, (un)substituted C6-10 aryl, and (un)substituted C5-13 heteroaryl, and Y is selected from Cl-6 alkylene, C2-6 alkylene, C2-6 alkynylene, -(C(O)NR<sub>5</sub>)<sub>2</sub>, and -OX-, where X and R<sub>5</sub> are as defined previously, or R<sub>3</sub> and R<sub>4</sub>, together with the atoms to which they are attached, form fused bi- or tricyclic C5-14 heteroaryl; including pharmaceutically acceptable salts, hydrates, solvates, isomers, and prodrugs thereof. The invention also relates to the preparation of I.

ACCESSION NUMBER: 2005:1262399 CAPLUS

DOCUMENT NUMBER: 144:22712

TITLE: Triaryl compounds as PPAR modulators, their preparation, pharmaceutical compositions, and use in therapy

INVENTOR(S): Epple, Robert; Azimioara, Mihaela

PATENT ASSIGNEE(S): ITRM LLC, Bermuda

SOURCE: PCT Int. Appl., 59 pp.

CODEN: PIIXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 200513506	A1	20051201	WO 2005-US16747	20050513
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, T2, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.:		US 2004-571004P	P	20040514

OTHER SOURCE(S): MARPAT 144:22712  
GI

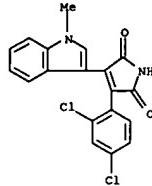
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The invention relates to aryl compds. of formula I, which are modulators of peroxisome proliferator-activated receptors (PPAR), particularly PPAR<sub>6</sub>. In compds. I, m is 0-3; X, Y, and Z are independently selected from CH and N; L is (un)substituted (CH<sub>2</sub>)<sub>n</sub>O(CH<sub>2</sub>)<sub>m</sub> or (CH<sub>2</sub>)<sub>n</sub>S(O)p(CH<sub>2</sub>)<sub>m</sub>, where each n is independently selected from 0-4 and p is 0-2; R<sub>1</sub> and R<sub>2</sub> are independently selected from (un)substituted C3-12 cycloalkyl-A-, (un)substituted C3-8 heterocyclyl-A-, (un)substituted

C6-10 aryl-A-, and (un)substituted C5-13 heteroaryl-A-, where A is a bond, Cl-6 alkylene, C2-6 alkenylene, or C2-6 alkynylene; R<sub>3</sub> is selected from halo, Cl-6 alkyl, Cl-6 alkoxy, Cl-6 hydroxalkyl, Cl-6 haloalkyl, Cl-6 haloalkoxy, (un)substituted C6-10 aryl, (un)substituted C3-10 heteroaryl, (un)substituted C3-12 cycloalkyl, and (un)substituted C3-8 heterocycl; and R<sub>4</sub> is selected from (CH<sub>2</sub>)<sub>n</sub>O(CH<sub>2</sub>)<sub>m</sub>CO<sub>2</sub>R<sub>5</sub> and (CH<sub>2</sub>)<sub>n</sub>CO<sub>2</sub>R<sub>5</sub>, where n is as defined previously and R<sub>5</sub> is H or Cl-6 alkyl; including pharmaceutically acceptable salts, hydrates, solvates, isomers, and prodrugs thereof. The invention also relates to the preparation of I, pharmaceutical compns. comprising a therapeutically effective amount of compound I in combination with one or more pharmaceutically acceptable excipients, as well as to the

L6 ANSWER 3 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued) pharmaceutical compns. comprising a therapeutically effective amt. of compd. I in combination with one or more pharmaceutically acceptable excipients, as well as to the use of the compns. to treat or prevent diseases or disorders assoc'd. with PPAR activity. Diazotization of 4-(trifluoromethoxy)acetophenone followed by heterocyclization with acetonitrile, and bromination gave bromooxazole II, which was brominated and substituted with phenol III (prepn. in 3 steps from 4-hydroxy-3-methylacetophenone given) to give oxazole IV. Compd. IV underwent Suzuki coupling with 2-isopropoxypyridin-5-ylboronic acid (prepn. from 2-chloro-5-bromopyridine given) and ester hydrolysis to give oxazole V. Most preferred compds. of the invention express an EC<sub>50</sub> value for PPAR<sub>6</sub> of less than 100 nM. The compds. of the invention are at least 100-fold selective for PPAR<sub>6</sub> over PPAR<sub>7</sub>.

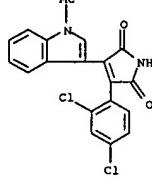
IT 280744-09-4, SB-216763  
RL: PAF (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(preparation of oxazoles as PPAR modulators and their use for treatment and prevention of diseases associated with PPAR activity)  
RN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)-(9CI) (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued) use of the compns. to treat or prevent diseases or disorders assoc'd. with PPAR activity. Substitution of Me bromoacetate with 4-hydroxy-3-methylacetophenone followed by Baeyer-Villiger oxidn. and methanolysis gave phenoxyacetate II, which underwent substitution of 3,5-dibromobenzyl bromide to give dibromobenzyl ether III. Treatment of III with an excess of 4-trifluoromethylphenylboronic acid and ester hydrolysis resulted in the formation of terphenyl IV. Most preferred compds. of the invention express an EC<sub>50</sub> value for PPAR<sub>6</sub> of less than 100 nM. The compds. of the invention are at least 100-fold selective for PPAR<sub>6</sub> over PPAR<sub>7</sub>.

IT 280744-09-4, SB-216763  
RL: PAF (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(preparation of triaryl compds. as PPAR modulators and their use for treatment and prevention of diseases associated with PPAR<sub>6</sub> activity)  
RN 280744-09-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)-(9CI) (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1259697 CAPLUS

DOCUMENT NUMBER: 144:22803

TITLE: Substituted pyrrole-2,5-diones as protein kinase C inhibitors, and their preparation, pharmaceutical compositions, and use as therapeutics, particularly

as

immunomodulators

INVENTOR(S): Van Eis, Maurice; Wagner, Juergen; Von Matt, Peter  
Novartis AG, Switz.; Novartis Pharma GmbH

SOURCE: PCT Int. Appl., 22 pp.

CODEN: PIKKD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

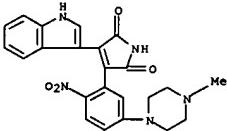
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005113545	A1	20051201	WO 2005-EP5183	20050512
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MM, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, T2, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRIORITY APPN. INFO.: GB 2004-10713			A 20040513	

OTHER SOURCE(S): MARPAT 144:22803  
GI

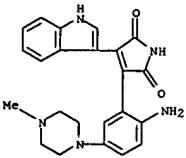
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Title compds. I are disclosed, as well as processes for their production, their uses (in particular in transplantation), and pharmaceutical compns. containing them. Claims cover compds. I (wherein Ra is H, Cl-4 alkyl, or Cl-4 alkyl substituted by OH, NH2, NH-Cl-4-alkyl or N-(Cl-4-alkyl)2; Rb is H, halo, Cl-6 alkyl, or Cl-6 alkoxy; each of R1 and R2, independently, is H or Me; R3 is F, Cl, acetamide, nitro, or amino; R4 is H, CH3, CF3, F or Cl; R4 being other than H, CH3, or CF3 when R3 is Cl; or a salt thereof). Fourteen specific compds. are claimed by name, and a slightly different list of 14 compds. are demonstrated in examples. Claims also cover the use of I and their salts and pharmaceutical compns. in the manufacture of medicaments for the treatment or prevention of diseases or disorders mediated by T lymphocytes and/or protein kinase C (PKC). Specifically claimed diseases include T-cell mediated acute or chronic inflammatory disorders, autoimmune diseases, graft rejection, cancer, and infectious diseases. Pharmaceutical agents containing I may also contain other active ingredients, including immunosuppressants, immunomodulators, antiinflammatories, chemotherapeutics, antiproliferatives, and

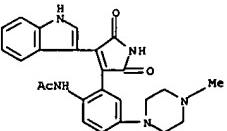
L6 ANSWER 5 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 870274-06-9 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[2-amino-5-(4-methyl-1-piperazinyl)phenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 870274-07-0 CAPLUS  
CN Acetamide,  
N-[2-(2,5-dihydro-4-(1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl)-4-(4-methyl-1-piperazinyl)phenyl]- (9CI) (CA INDEX NAME)



RN 870274-08-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(7-methyl-1H-indol-3-yl)-4-[5-(4-methyl-1-piperazinyl)-2-nitrophenyl]- (9CI) (CA INDEX NAME)

L6 ANSWER 5 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

antidiabetic agents. The prodr. of I by cyclocondensation of (1H-indol-3-yl)oxoacetic acid Me esters with corresponding 2-arylamidetanes is also claimed. For instance, 4-bromonitrobenzene was coupled with ClCH2CO2Et using KOBu-tert in THF at -40° to give Et (5-bromo-2-nitrophenyl)acetate. Reaction of this bromide with 1-methylpiperazine at 65° (neat), followed by ammonolysis of the ester moiety with aq. 33% NH4OH at room temp., gave acetamide deriv. II. Cyclocondensation of II with Me (1H-indol-3-yl)oxoacetate in THF in the presence of KOBu-tert gave invention compd. III, isolated as the water-sol. acetate salt. III inhibited human recombinant PKCα in vitro with an IC50 of 8.9 nM, and inhibited PKCα with an IC50 of 2.6 nM. III also had IC50 values of 25.5 nM in a CD28 costimulation assay, and 17.5 nM in a mixed lymphocyte reaction (MLR) assay. Increases in survival time were also obtained (no data) in a rat heart transplantation assay, using I at daily oral doses of 1-30 mg/kg b.i.d.

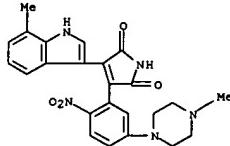
IT (1H-Indol-3-yl)-4-[5-(4-methylpiperazin-1-yl)-2-nitrophenyl]pyrrole-2,5-dione 870274-06-9P, 3-[2-Amino-5-(4-methylpiperazin-1-yl)phenyl]pyrrole-2,5-dione 870274-07-0P, N-[2-(4-(1H-Indol-3-yl)-2,5-dioxo-5,5-dihydro-1H-pyrrol-1-yl)-4-(4-methylpiperazin-1-yl)phenyl]acetamide 870274-08-1P, 3-(7-Methyl-1H-indol-3-yl)-4-(4-methylpiperazin-1-yl)phenyl]pyrrole-2,5-dione 870274-09-2P, 3-(2-Amino-5-(4-methylpiperazin-1-yl)phenyl)-4-(7-methyl-1H-indol-3-yl)pyrrole-2,5-dione 870274-10-5P, N-[2-(4-(7-Methyl-1H-indol-3-yl)-2,5-dioxo-2,5-dihydro-1H-pyrrol-3-yl)-4-(4-methylpiperazin-1-yl)phenyl]acetamide 870274-11-6P, 3-(2-Fluoro-5-(4-methylpiperazin-1-yl)phenyl)-4-(1H-indol-3-yl)pyrrole-2,5-dione 870274-12-7P, 3-(2-Fluoro-5-(4-methylpiperazin-1-yl)phenyl)-4-(1H-indol-3-yl)pyrrole-2,5-dione 870274-13-8P, 3-(2-Fluoro-5-(4-methylpiperazin-1-yl)phenyl)-4-(7-methyl-1H-indol-3-yl)pyrrole-2,5-dione 870274-14-9P, 3-(2-Difluoro-5-(4-methylpiperazin-1-yl)phenyl)-4-(1H-indol-3-yl)pyrrole-2,5-dione 870274-15-0P, 3-(2-Difluoro-5-(4-methylpiperazin-1-yl)phenyl)-4-(1-methyl-1H-indol-3-yl)pyrrole-2,5-dione 870274-16-1P,

3-(2,4-Difluoro-5-(4-methylpiperazin-1-yl)phenyl)-4-(1,7-dimethyl-1H-indol-3-yl)pyrrole-2,5-dione 870274-17-2P, 3-(4-Chloro-2-fluoro-5-(4-methylpiperazin-1-yl)phenyl)-4-(1H-indol-3-yl)pyrrole-2,5-dione 870274-18-3P, 3-(4-Chloro-2-fluoro-5-(4-methylpiperazin-1-yl)phenyl)pyrrole-2,5-dione 870274-24-1P, 3-(7-methyl-1H-indol-3-yl)pyrrole-2,5-dione 870274-26-3P, 3-(7-methyl-1H-indol-3-yl)pyrrole-2,5-dione 870274-29-6P, 3-(2,4-Difluoro-5-(4-methylpiperazin-1-yl)phenyl)-4-(7-methyl-1H-indol-3-yl)pyrrole-2,5-dione 870274-30-9P,

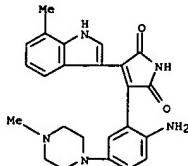
3-(2-Chloro-4-fluoro-5-(4-methylpiperazin-1-yl)phenyl)-4-(1H-indol-3-yl)pyrrole-2,5-dione 870274-31-0P, 3-(2-Chloro-4-fluoro-5-(4-methylpiperazin-1-yl)phenyl)-4-(7-methyl-1H-indol-3-yl)pyrrole-2,5-dione 870274-31-0P, RN (Synthetic preparation); THU (Uses); BAC (Pharmacological activity); SPN (Synthetic preparation); THU (Uses); (drug candidate; preparation of pyrrolediones as protein kinase C inhibitors for use as immunomodulators)

RN 870274-05-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[5-(4-methyl-1-piperazinyl)-2-nitrophenyl]- (9CI) (CA INDEX NAME)

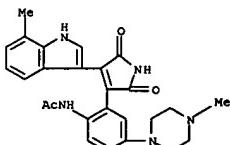
L6 ANSWER 5 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



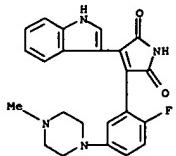
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CN 1H-Pyrrole-2,5-dione, 3-[2-amino-5-(4-methyl-1-piperazinyl)phenyl]-4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



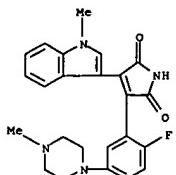
RN 870274-10-5 CAPLUS  
CN Acetamide, N-[2-(2,5-dihydro-4-(7-methyl-1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl)-4-(4-methyl-1-piperazinyl)phenyl]- (9CI) (CA INDEX NAME)



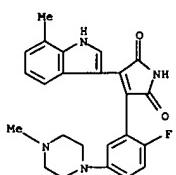
RN 870274-11-6 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(2-fluoro-5-(4-methyl-1-piperazinyl)phenyl)-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



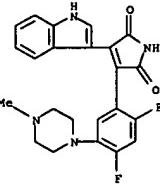
RN 870274-12-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[2-fluoro-5-(4-methyl-1-piperazinyl)phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



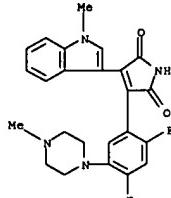
RN 870274-13-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[2-fluoro-5-(4-methyl-1-piperazinyl)phenyl]-4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



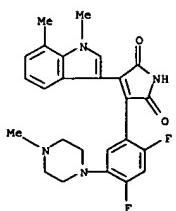
RN 870274-14-9 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(2,4-difluoro-5-(4-methyl-1-piperazinyl)phenyl)-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



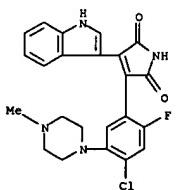
RN 870274-15-0 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[2,4-difluoro-5-(4-methyl-1-piperazinyl)phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



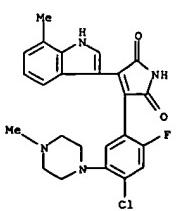
RN 870274-16-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[2,4-difluoro-5-(4-methyl-1-piperazinyl)phenyl]-4-(1,7-dimethyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 870274-17-2 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[4-chloro-2-fluoro-5-(4-methyl-1-piperazinyl)phenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



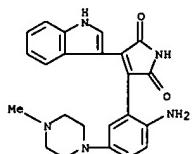
RN 870274-18-3 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(4-chloro-2-fluoro-5-(4-methyl-1-piperazinyl)phenyl)-4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 870274-23-0 CAPLUS

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CRN 870274-06-9  
CMF C23 H23 N5 O2



CM 2

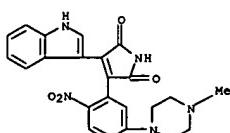
CRN 64-19-7  
CMF C2 H4 O2



RN 870274-24-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[5-(4-methyl-1-piperazinyl)-2-nitrophenyl]-, acetate (9CI) (CA INDEX NAME)

CM 1

CRN 870274-05-8  
CMF C23 H21 N5 O4



CM 2

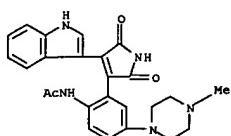
CRN 64-19-7



RN 870274-26-3 CAPLUS  
CN Acetamide,  
N-[2-(2,5-dihydro-4-(1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl)-4-(4-methyl-1-piperazinyl)phenyl]-, acetate (9CI) (CA INDEX NAME)

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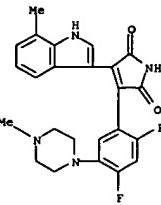


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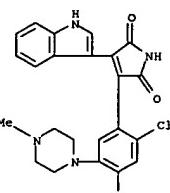
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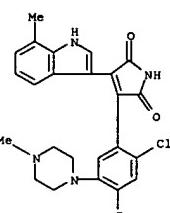
RN 870274-31-6 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(2,4-difluoro-5-(4-methyl-1-piperazinyl)phenyl)-4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 870274-30-9 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-4-fluoro-5-(4-methyl-1-piperazinyl)phenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 870274-31-0 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-4-fluoro-5-(4-methyl-1-piperazinyl)phenyl]-4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



L6 ANSWER 5 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L6 ANSWER 6 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2005:12595663 CAPLUS  
DOCUMENT NUMBER: 144:22911  
TITLE: Isoxazole compounds as PPAR modulators, their preparation, pharmaceutical compositions, and use in therapy  
INVENTOR(S): Epple, Robert; Russo, Ross; Azimioara, Mihai; Xie, Yongping  
PATENT ASSIGNEE(S): IRM LLC, Bermuda  
SOURCE: PCT Int. Appl., 79 pp.  
CODEN: PIIXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

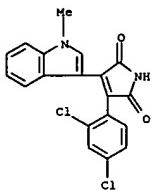
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005113519	A1	20051201	WO 2005-US16672	20050512
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, A2, BY, KG, K2, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.:			US 2004-571003P	P 20040514
OTHER SOURCE(S):	MARPAT	144:22911		
GI				

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The invention relates to isoxazole compds. of formula I, which are modulators of peroxisome proliferator-activated receptors (PPAR), particularly PPAR $\delta$ . In compds. I, R1 is selected from (un)substituted C1-6 alkyl, (un)substituted C3-12 cycloalkyl, (un)substituted C3-8 heterocycl, (un)substituted C6-10 aryl, and (un)substituted C5-10 heteroaryl; R2 is selected from (CH<sub>2</sub>)<sub>n</sub>O(CH<sub>2</sub>)<sub>n</sub>R5, (CH<sub>2</sub>)<sub>n</sub>R5, CO<sub>2</sub>R5, C(O)N(R4)2, C(O)N(R4)(CH<sub>2</sub>)<sub>n</sub>R5, C(O)N(R4)(CH<sub>2</sub>)<sub>n</sub>R5, C(O)N(R4)R5, and C(O)N(R4)(CH<sub>2</sub>)<sub>n</sub>R5, where n is 0-4, R4 is H or C1-6 alkyl, and R5 is C1-6 alkyl, C3-12 cycloalkyl, C3-8 heterocycl, C6-10 aryl, or C5-10 heteroaryl, or R4 and R5, together with the nitrogen atom to which they are attached, form C3-8 heterocycl or C5-10 heteroaryl; and R3 is selected from (un)substituted C3-12 cycloalkyl, (un)substituted C3-8 heterocycl, (un)substituted C6-10 aryl, and (un)substituted C5-10 heteroaryl; including pharmaceutically acceptable salts, hydrates, solvates, isomers, and prodrugs thereof. The invention also relates to the preparation of I, pharmaceutical compns. comprising a therapeutically effective amount of compound I in combination with one or more pharmaceutically acceptable excipients, as well as to the

L6 ANSWER 6 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
use of the compns. to treat or prevent diseases or disorders assocd. with PPAR activity. Esterification of 3-bromophenylacetic acid followed by coupling with cyanide, redn. of the nitrile to an aldehyde, condensation with hydroxylamine, and chlorination gave chlorooxime II. N-Boc-2-bromoethylamine was substituted with 2,4-dichlorophenol followed by deprotection, amidation with Et benzoylacetate to give benzoylacetamide III, which underwent cyclocondensation with chlorooxime II and ester hydrolysis, resulting in the formation of isoxazole IV. Most preferred compds. of the invention express an EC50 value for PPAR $\delta$  of less than 100 nM. The compds. of the invention are at least 100-fold selective for PPAR $\delta$  over PPAR $\alpha$ .

IT 280744-09-4, SB-216763  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(compdns. and compns. as PPAR modulators and their use for treatment and prevention of diseases associated with activity of PPAR families, particularly PPAR $\delta$ )  
RN 280744-09-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)-(9CI) (CA INDEX NAME)

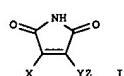


REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 7 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
ACCESSION NUMBER: 2005:1220648 CAPLUS  
DOCUMENT NUMBER: 143:454391  
TITLE: Preparation of maleimide derivatives as plant growth regulators  
INVENTOR(S): Bastiansen, Henricus M. M.; Donn, Guenter; Knittel, Nathalie; Martelletti, Arianna; Rees, Richard; Schwall, Michael; Whitford, Ryan  
PATENT ASSIGNEE(S): Bayer CropScience G.m.b.H., Germany  
SOURCE: PCT Int. Appl., 65 pp.  
CODEN: PIXXDZ  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

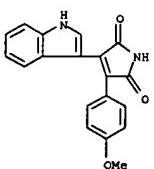
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005107465	A1	20051117	WO 2005-EPA688	20050430
W: AE, AG, AL, AM, AT, AU, A2, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.: EP 2004-11255				A 20040512

OTHER SOURCE(S): MARPAT 143:454391  
GI

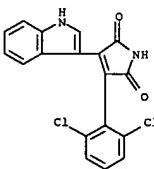


AB The 3,4-disubstituted maleimide derivs. I or salts thereof, wherein: X is aryl or heteroaryl which groups are unsubstituted or substituted; Y is NH or a covalent bond, and Z is aryl or heteroaryl which groups are unsubstituted or substituted, may be prepared as plant growth regulators.  
IT 221233-43-8 869110-78-1 869110-80-52  
RL: AGI (Agricultural use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparations as plant growth regulator)  
RN 221233-43-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-(4-methoxyphenyl)-(9CI) (CA INDEX NAME)

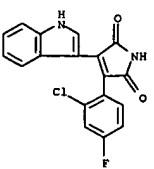
L6 ANSWER 7 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 869110-78-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(2,6-dichlorophenyl)-4-(1H-indol-3-yl)-(9CI) (CA INDEX NAME)



RN 869110-80-5 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(2-chloro-4-fluorophenyl)-4-(1H-indol-3-yl)-(9CI) (CA INDEX NAME)

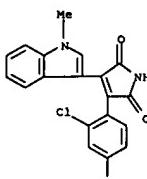


REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 8 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
ACCESSION NUMBER: 2005:1026867 CAPLUS  
DOCUMENT NUMBER: 143:319140  
TITLE: Methods and compositions related to regulation of cytokine production by glycogen synthase kinase 3 (GSK-3)  
INVENTOR(S): Martin, Michael  
PATENT ASSIGNEE(S): The Uab Research Foundation, USA  
SOURCE: PCT Int. Appl., 70 pp.  
CODEN: PIXXDZ  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

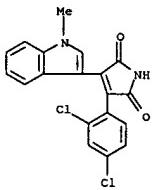
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005086814	A2	20050922	WO 2005-US7586	20050309
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.: US 2004-551646P				P 20040309

AB This invention relates generally to a method of treating inflammation and associated diseases and disorders by administering an agent that inhibits glycogen synthase kinase 3 activity.  
IT 280744-09-4, SB216763  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(methods and compns. related to regulation of cytokine production by inhibitors of glycogen synthase kinase 3 for treatment of inflammation)  
RN 280744-09-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)-(9CI) (CA INDEX NAME)



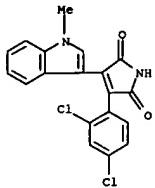
L6 ANSWER 9 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2005:988238 CAPLUS  
 DOCUMENT NUMBER: 144:121206  
 TITLE: GSK-3 $\beta$  inhibitors attenuate the organ injury/dysfunction caused by endotoxemia in the rat  
 AUTHOR(S): Dugo, Laura; Collin, Marika; Allen, David A.; Patel, Nimesh S. A.; Bauer, Inge; Mervaala, Eero M. A.; Louhelahti, Marjut; Foster, Simon J.; Yaqoob, Muhammad H.; Thiemermann, Christoph  
 CORPORATE SOURCE: Centre for Experimental Medicine, Nephrology and Critical Care Medicine, The William Harvey Research Institute, St. Bartholomew's and The Royal London School of Medicine and Dentistry, London, UK  
 SOURCE: Critical Care Medicine (2005), 33(9), 1903-1912  
 CODEN: CCMDC7; ISSN: 0090-3493  
 PUBLISHER: Lippincott Williams & Wilkins  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Objective: Serine-threonine protein kinase glycogen synthase kinase (GSK)-3 is involved in regulation of many cell functions, but its role in regulation of inflammatory response is unknown. Here we investigate the effects of GSK-3 $\beta$  inhibition on organ injury/dysfunction caused by lipopolysaccharide or coadministration of lipopolysaccharide and peptidoglycan in the rat. Design: Prospective, randomized study. Setting: University-based research laboratory. Subjects: Ninety-nine anesthetized male Wistar rats. Interventions: Study 1: Rats received either i.v. *E. coli* lipopolysaccharide (6 mg/kg) or vehicle (1 mL/kg; saline). Study 2: Rats received either i.v. *E. coli* lipopolysaccharide (1 mg/kg) and *Staphylococcus aureus* peptidoglycan (0.3 mg/kg) or vehicle. The potent and selective GSK-3 $\beta$  inhibitor TDZD-8 (1 mg/kg i.v.), SB216763 (0.6 mg/kg i.v.), and SB415286 (1 mg/kg i.v.) or vehicle (10% DMSO) was administered 30 mins before lipopolysaccharide or lipopolysaccharide and peptidoglycan. Measurements and main results: Endotoxemia resulted in increases in the serum levels of creatinine (indicator of renal dysfunction), aspartate aminotransferase, alanine aminotransferase (markers for hepatocellular injury), lipase (indicator of pancreatic injury), and creatine kinase (indicator of neuromuscular injury). Coadministration of lipopolysaccharide and peptidoglycan resulted in hepatocellular injury and renal dysfunction. All GSK-3 $\beta$  inhibitors attenuated the organ injury/dysfunction caused by lipopolysaccharide or lipopolysaccharide and peptidoglycan. GSK-3 $\beta$  inhibition reduced the Ser36 phosphorylation of nuclear factor- $\kappa$ B subunit p65 and the mRNA expression of nuclear factor- $\kappa$ B-dependent proinflammatory mediators but had no effect on the nuclear factor- $\kappa$ B/DNA binding activity in the lung. GSK-3 $\beta$  inhibition reduced the increase in nuclear factor- $\kappa$ B p65 activity caused by interleukin-1 in human embryonic kidney cells in vitro. Conclusions: The potent and selective GSK-3 $\beta$  inhibitors TDZD-8, SB216763, and SB415286 reduced the organ injury/dysfunction caused by lipopolysaccharide or lipopolysaccharide and peptidoglycan in the rat. We propose that GSK-3 $\beta$  inhibition may be useful in the therapy of the organ injury/dysfunction associated with sepsis, shock, and other diseases associated with local or systemic inflammation.  
 IT 280744-09-4, SB216763  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (GSK-3 $\beta$  inhibitors SB216763 reduced renal dysfunction, hepatocellular, pancreatic and neuromuscular injury caused by coadministration of LPS and peptidoglycan with induced ser9

L6 ANSWER 9 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 RN 280744-09-4 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)-(9CI) (CA INDEX NAME)



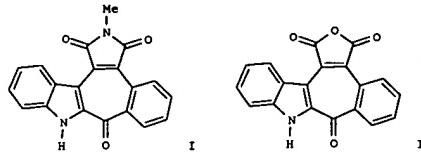
REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 10 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2005:941554 CAPLUS  
 DOCUMENT NUMBER: 143:399728  
 TITLE: GSK-3 $\beta$  inhibitors reduce protein degradation in muscles from septic rats and in dexamethasone-treated myotubes  
 AUTHOR(S): Evenson, Amy R.; Fareed, Moin U.; Menconi, Michael J.; Mitchell, Jamie C.; Hasselgren, Per-Olof  
 CORPORATE SOURCE: Department of Surgery, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA, 02215,  
 USA  
 SOURCE: International Journal of Biochemistry & Cell Biology (2005), 37(10), 2226-2238  
 CODEN: IJBBFU; ISSN: 1357-2725  
 PUBLISHER: Elsevier Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Sepsis is associated with muscle wasting, mainly reflecting increased muscle proteolysis. Recent studies suggest that inhibition of GSK-3 $\beta$  activity may counteract catabolic stimuli in skeletal muscle. We tested the hypothesis that treatment of muscles from septic rats with the GSK-3 $\beta$  inhibitors LiCl and TDZD-8 would reduce sepsis-induced muscle proteolysis. Because muscle wasting during sepsis is, at least in part, mediated by glucocorticoids, we also tested the effects of GSK-3 $\beta$  inhibitors on protein degradation in dexamethasone-treated cultured myotubes. Treatment of incubated extensor digitorum longus muscles with LiCl or TDZD-8 reduced basal and sepsis-induced protein breakdown rates. When cultured myotubes were treated with LiCl or one of the GSK-3 $\beta$  inhibitors SB216763 or SB415286, protein degradation was reduced. Treatment of incubated muscles or cultured myotubes with LiCl, but not the other GSK-3 $\beta$  inhibitors, resulted in increased phosphorylation of GSK-3 $\beta$  at Ser9, consistent with inactivation of the kinase and suggesting that the other inhibitors used in the present expts. inhibit GSK-3 $\beta$  by phosphorylation-independent mechanisms. The present results suggest that GSK-3 $\beta$  inhibitors may be used to prevent or treat sepsis-induced, glucocorticoid-regulated muscle proteolysis.  
 IT 280744-09-4, SB216763  
 RL: PAC (Pharmacological activity); BIOL (Biological study)  
 (GSK-3 $\beta$  inhibitors reduce protein degradation in muscles from septic rats and in dexamethasone-treated myotubes)  
 RN 280744-09-4 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)-(9CI) (CA INDEX NAME)

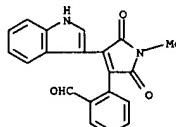


REFERENCE COUNT: 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

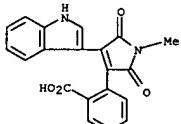
L6 ANSWER 11 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2005:708413 CAPLUS  
DOCUMENT NUMBER: 143:306120  
TITLE: First efficient synthesis of novel oxophenyl-arcyriaflavin analogs  
AUTHOR(S): Bourderiou, Aurelie; Routier, Sylvain; Beneteau, Valerie; Merour, Jean-Yves  
CORPORATE SOURCE: Institut de Chimie Organique et Analytique, UMR CNRS 6005, Universite d'Orleans, Orleans, 45067, Fr.  
SOURCE: Tetrahedron Letters (2005), 46(36), 6071-6074  
PUBLISHER: Elsevier B.V.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI



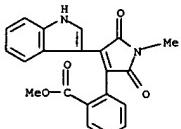
AB New oxophenylarcyriaflavins I and II were synthesized in a few efficient steps. The key steps involved at first a palladium cross-coupling between the 3-bromo-4-(1H-indol-3-yl)-1-methylpyrrole-2,5-dione and the 2-formylphenylboronic acid or a Me 2-trialkylstannylbenzoate, followed by an intramol. acylation in a C-2 indolic position. All the sequence was carried out without any indolic protective group.  
IT 864963-47-3P 864963-49-5P 864963-57-5P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
RN 864963-47-3 CAPLUS  
CN Benzaldehyde, 2-(2,5-dihydro-4-(1H-indol-3-yl)-1-methyl-2,5-dioxo-1H-pyrrol-3-yl)- (9CI) (CA INDEX NAME)



RN 864963-49-5 CAPLUS  
CN Benzoic acid, 2-[2,5-dihydro-4-(1H-indol-3-yl)-1-methyl-2,5-dioxo-1H-



RN 864963-57-5 CAPLUS  
CN Benzoic acid, 2-[2,5-dihydro-4-(1H-indol-3-yl)-1-methyl-2,5-dioxo-1H-pyrrol-3-yl]-, methyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L6 ANSWER 12 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2005:673288 CAPLUS  
DOCUMENT NUMBER: 143:153287  
TITLE: Preparation of indolylmaleimide derivatives as PKC inhibitors  
INVENTOR(S): Van Eis, Maurice; Von Matt, Peter; Wagner, Juergen; Evenou, Jean-Pierre; Schuler, Walter  
PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.  
SOURCE: PCT Int. Appl., 61 pp.  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

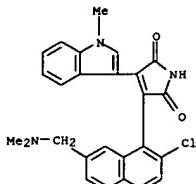
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005068455	A1	20050728	WO 2005-EP502	20050119
W: AE, AG, AL, AM, AT, AU, A2, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, M2, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TZ, TJ, TM, TN, TR, TT, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, BW, GH, GM, KE, LS, MW, M2, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, C2, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.:			GB 2004-1089	A 20040119
			GB 2004-1090	A 20040119

OTHER SOURCE(S): MARPAT 143:153287  
GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Title compds. I [R1 = H or (un)substituted alkyl; one of R2-5 = halo, alkoxy, alkyl, etc. and the other three are each H or all are H; R = (un)substituted naphthyl or pyridyl] and their pharmaceutically acceptable salts, are prepared and disclosed as inhibitors of protein kinase C (PKC). Thus, e.g., the bis-acetate salt of II was prepared by coupling of 2-(2-chloro-7-dimethylaminomethyl-naphthalen-1-yl)-acetamide (preparation given) with (1-methyl-1H-indol-3-yl)-oxo-acetic acid Me ester. The activity of I was evaluated in protein kinase C $\beta$  assay and it was revealed that compds. of the invention inhibit PKC $\beta$  with an IC $50$  if less or equal to 1 $\mu$ M. I was inhibitor of PKC should prove useful in the treatment of infectious diseases, cardiovascular diseases and cancer. Pharmaceutical compnds. comprising I are disclosed.  
IT 860468-10-6P 860468-11-7P 860468-12-8P  
860468-13-9P 860468-14-0P 860468-15-1P  
860468-16-2P 860468-17-3P 860468-18-4P  
860468-19-5P 860468-20-8P 860468-21-9P  
860468-22-0P 860468-23-1P 860468-24-2P  
860468-25-3P 860468-26-4P 860468-27-5P

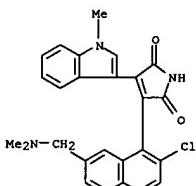
L6 ANSWER 12 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 860468-28-6P 860468-29-7P 860468-30-0P  
 860468-31-1P 860468-32-2P 860468-33-3P  
 860468-34-4P 860468-35-5P 860468-36-6P  
 860468-37-7P  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses); (prepn. of indolymaleimide derivs. as PKC inhibitors)  
 RN 860468-10-6 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-7-[(dimethylamino)methyl]-1-naphthalenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 860468-11-7 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-7-[(dimethylamino)methyl]-1-naphthalenyl]-4-(1-methyl-1H-indol-3-yl)-, diacetate (9CI) (CA INDEX NAME)

CM 1

CRN 860468-10-6  
 CMF C26 H22 Cl N3 O2



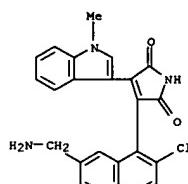
CM 2

CRN 64-19-7  
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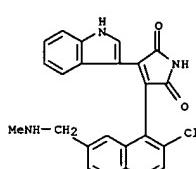
L6 ANSWER 12 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 860468-12-8 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-[7-(aminomethyl)-2-chloro-1-naphthalenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

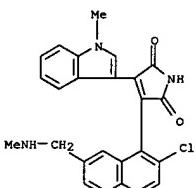


RN 860468-13-9 CAPLUS  
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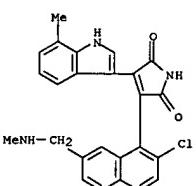


RN 860468-14-0 CAPLUS  
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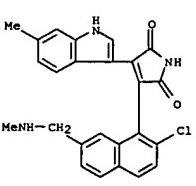
L6 ANSWER 12 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 860468-15-1 CAPLUS  
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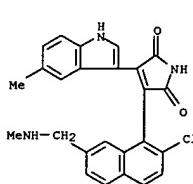


RN 860468-16-2 CAPLUS  
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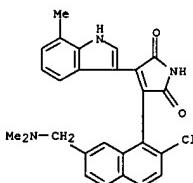


RN 860468-17-3 CAPLUS  
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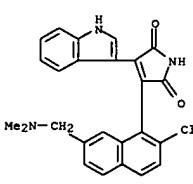
L6 ANSWER 12 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



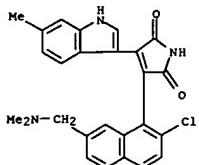
RN 860468-18-4 CAPLUS  
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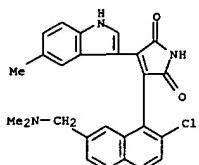
RN 860468-19-5 CAPLUS  
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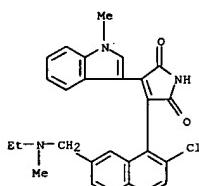
RN 860468-20-8 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-7-[(dimethylamino)methyl]-1-naphthalenyl]-4-(6-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



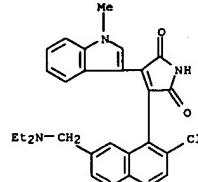
RN 860468-21-9 CAPLUS  
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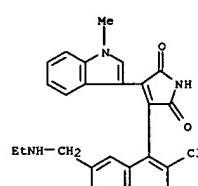
RN 860468-22-0 CAPLUS  
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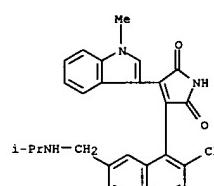
RN 860468-23-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[2-chloro-7-[(diethylamino)methyl]-1-naphthalenyl]-  
4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



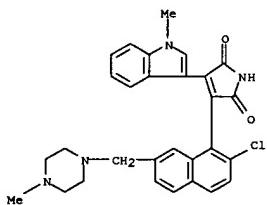
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CN 1H-Pyrrole-2,5-dione,  
3-[2-chloro-7-[(ethylaminomethyl)methyl]-1-naphthalenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



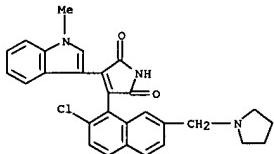
RN 860468-25-3 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-7-[(isopropylaminomethyl)methyl]-1-naphthalenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 860468-26-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-7-[(4-methyl-1-piperazinyl)methyl]-1-naphthalenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 860468-27-5 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[2-chloro-7-(1-pyrrolidinylmethyl)-1-naphthalenyl]-  
4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



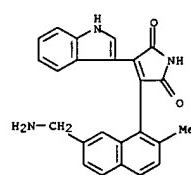
RN 860468-28-6 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[7-(aminomethyl)-2-methyl-1-naphthalenyl]-4-(1,7-dimethyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 860468-29-7 CAPLUS  
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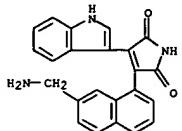
RN 860468-30-0 CAPLUS  
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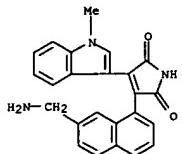
RN 860468-31-1 CAPLUS  
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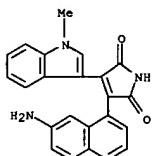
RN 860468-32-2 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[7-(aminomethyl)-1-naphthalenyl]-4-(1H-indol-3-yl)-  
(9CI) (CA INDEX NAME)



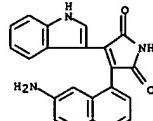
RN 860468-33-3 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(7-(aminomethyl)-1-naphthalenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



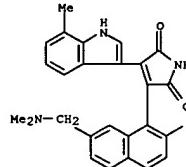
RN 860468-34-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(7-amino-1-naphthalenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



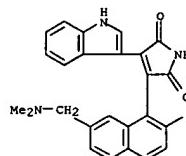
RN 860468-35-5 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(7-amino-1-naphthalenyl)-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 860468-36-6 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[7-((dimethylamino)methyl)-2-fluoro-1-naphthalenyl]-4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 860468-37-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[7-((dimethylamino)methyl)-2-fluoro-1-naphthalenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L6 ANSWER 13 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2005:673287 CAPLUS  
DOCUMENT NUMBER: 143:172756  
TITLE: Preparation of indolylmaleimide derivatives as PKC inhibitors  
INVENTOR(S): Van Els, Maurice; Von Matt, Peter; Wagner, Juergen; Evenou, Jean-Pierre  
PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.  
SOURCE: PCT Int. Appl., 24 pp.  
CODEN: PIXXD2

DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005068454	A1	20050728	W 2005-EP501	20050119
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, T2, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
PRIORITY APPLN. INFO.:		GB 2004-1089	A	20040119
		GB 2004-1090	A	20040119

OTHER SOURCE(S): MARPAT 143:172756  
GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Title compds. I [R1 = H or (un)substituted alkyl; one of R2-5 = halo, alkoxy or alkyl and the other three are each H or R2, R4 and R5 are all H;

R = substituted naphthyl] and their pharmaceutically acceptable salts, are prepared and disclosed as inhibitors of protein kinase C (PKC). Thus,

e.g., II was prepared by coupling of

2-(2-chloro-6-dimethylaminomethyl-naphthalen-1-yl)-acetamide (preparation given) with (1-methyl-1H-indol-3-yl)-oxo-acetic acid Me ester. The activity of II was evaluated in protein kinase C assay and it was revealed that it inhibits PKC with an IC50 of 17.6 nm. It was inhibitor of PKC should prove useful in the treatment of infectious diseases, inflammatory disease and cancer. Pharmaceutical compns. comprising I are disclosed.

IT 86046-70-4P 86046-71-5P 86046-72-6P

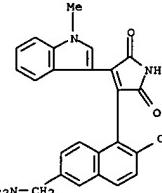
86046-73-7P 86046-74-8P 86046-75-9P

86046-76-0P 86046-77-1P

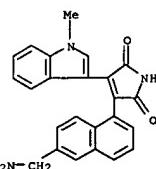
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU

L6 ANSWER 13 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of indolylmaleimide derivs. as PKC inhibitors)  
RN 86046-70-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-6-((dimethylamino)methyl)-1-naphthalenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



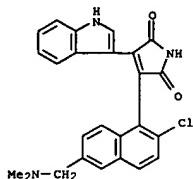
RN 86046-71-5 CAPLUS  
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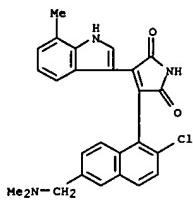
RN 86046-72-6 CAPLUS  
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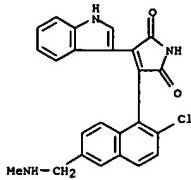
RN 860646-73-7 CAPLUS  
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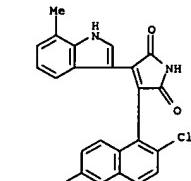
RN 860646-74-8 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-6-[(dimethylamino)methyl]-1-naphthalenyl]-4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



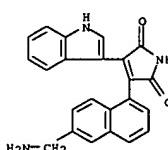
RN 860646-75-9 CAPLUS  
 CN 1H-Pyrrole-2,5-dione,  
 3-[2-chloro-6-[(methylamino)methyl]-1-naphthalenyl]-  
 4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 860646-76-0 CAPLUS  
 CN 1H-Pyrrole-2,5-dione,  
 3-[2-chloro-6-[(methylamino)methyl]-1-naphthalenyl]-  
 4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 860646-77-1 CAPLUS  
 CN 1H-Pyrrole-2,5-dione,  
 3-[6-(aminomethyl)-1-naphthalenyl]-4-(1H-indol-3-yl)-  
 (9CI) (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

ACCESSION NUMBER: 2005:612449 CAPLUS  
 DOCUMENT NUMBER: 143:127818  
 TITLE: Method for in vitro differentiation of neuronal stem cells or cells derived from neuronal stem cells  
 INVENTOR(S): Maurer, Martin H.; Feldmann, Robert E.; Kuschinsky, Wolfgang; Schneider, Armin  
 PATENT ASSIGNEE(S): Axaron Bioscience A.-G., Germany  
 SOURCE: PCT Int. Appl., 64 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005063966	A2	20050714	WO 2004-EPI4673	20041223
WO 2005063966	A3	20051027		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, T2, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 10361444	A1	20050721	DE 2003-10361444	20031223
PRIORITY APPLN. INFO.:			DE 2003-10361444	A 20031223

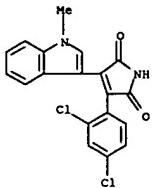
AB The method for in vitro differentiation of neuronal stem cells comprises the following: the cells are brought into contact with a substance which inhibits a reaction of the Wnt signal transduction path, and said cells are cultivated in conditions enabling the cells to multiply and/or differentiate. In a preferred embodiment of the method, the neuronal

stem cells differentiate to form cells which are similar to brain cells.

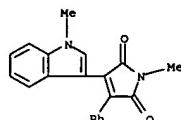
IT 280744-09-4 RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(Uses) (method for in vitro differentiation of neuronal stem cells or cells derived from neuronal stem cells)

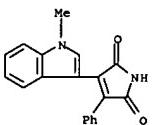
RN 280744-09-4 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



L6 ANSWER 15 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2005:511386 CAPLUS  
 DOCUMENT NUMBER: 143:193881  
 TITLE: Inhibition of hydrogen peroxide-induced necrotic cell death with 3-amino-2-indolylmaleimide derivatives  
 AUTHOR(S): Dodo, Kouuke; Katah, Miharu; Shimizu, Tadashi;  
 Takahashi, Masahiro; Sodeoka, Mikiko  
 CORPORATE SOURCE: Institute of Multidisciplinary Research for Advanced Materials (IMRAM), Tohoku University, Aoba, Sendai,  
 Miyagi, 980-8577, Japan  
 SOURCE: Bioorganic & Medicinal Chemistry Letters (2005),  
 15(12), 3114-3118  
 CODEN: BMCLB8; ISSN: 0960-894X  
 PUBLISHER: Elsevier B.V.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Novel analogs of (indolyl)maleimide derivs. were synthesized and tested for cell death-inhibitory activity. It was found that 2-(1H-indol-3-yl)-3-(pentylamino)maleimide (I) was the most effective cell death inhibitor among the compds. tested. I inhibited necrotic cell death induced by H2O2, but not apoptotic cell death induced by etoposide. These results indicated that this novel cell death inhibitor is distinct from the well-known caspase inhibitor, Z-VAD, which can block apoptotic cell death, but not necrotic cell death. I is expected to be a powerful bioprobe for clarifying the unique signaling pathway of necrotic cell death.  
 IT 327602-10-8P  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (preparation of (indolyl)maleimide derivs. and study of their activity toward inhibition of hydrogen peroxide-induced necrotic cell death and etoposide-induced apoptotic cell death)  
 RN 327602-10-8 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 1-methyl-3-(1-methyl-1H-indol-3-yl)-4-phenyl- (9CI)  
 (CA INDEX NAME)



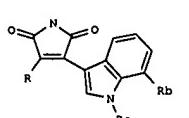
IT 125313-97-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of (indolyl)maleimide derivs. and study of their activity toward inhibition of hydrogen peroxide-induced necrotic cell death and etoposide-induced apoptotic cell death)  
 RN 125313-97-5 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-phenyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

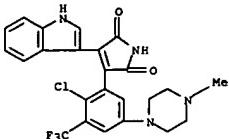
L6 ANSWER 16 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2005:395073 CAPLUS  
 DOCUMENT NUMBER: 142:423872  
 TITLE: Indolyl-pyroldiones derivatives for the treatment of neurological and vascular disorders related to beta-amyloid generation and/or aggregation  
 INVENTOR(S): Auberson, Yves; Bilbe, Graeme; Kuhn, Rainier R.; Von Matt, Peter; Rueeger, Heinrich; Staufenbiel, Matthias;  
 PATENT ASSIGNEE(S): Novartis Ag, Switz.; Novartis Pharma GmbH  
 SOURCE: PCT Int. Appl., 24 pp.  
 CODEN: PIIXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005039549	A1	20050506	WO 2004-EP12082	20041026
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, K2, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.:			GB 2003-25032	A 20031027
			GB 2003-25176	A 20031028
OTHER SOURCE(S): GI			MARPAT 142:423872	



AB The invention relates to the use of an inhibitor of formula I (where Ra = C1-4 alkyl, etc., Rb = H, C1-4 alkyl, R = radical formula), or a pharmaceutically acceptable salt thereof having an activity on protein kinases PKC alpha, PKC beta, PKC gamma, PKC epsilon, PKC theta, CDK-1, KDR, PKA, Flt-1, Flt-3 or Flt-4, or on a combination of the above enzymes, for the treatment and/or prevention of neural and vascular disorders related to beta-amyloid generation and/or aggregation such as neurodegenerative diseases like Down's Syndrome, memory and cognitive impairment, dementia, amyloid neuropathies, brain inflammation, nerve and brain trauma, vascular amyloidosis, or cerebral hemorrhage with

L6 ANSWER 16 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 IT amyloidosis.  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (indolyl-pyrrolediones deriva. for treatment of neurol. and vascular disorders related to beta-amyloid generation and/or aggregation)  
 RN 850798-87-7 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(2-chloro-5-(4-methyl-1-piperazinyl)-3-(trifluoromethyl)phenyl)-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

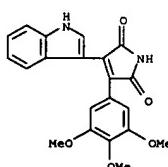
L6 ANSWER 17 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 ACCESSION NUMBER: 2005:366859 CAPLUS  
 DOCUMENT NUMBER: 143:473102  
 TITLE: Gene array analysis of Wnt-regulated genes in C3H10T1/2 cells  
 AUTHOR(S): Jackson, Amanda; Vayssiere, Beatrice; Garcia, Teresa; Newell, William; Baron, Roland; Roman-Roman, Sergio; Rawadi, Georges  
 CORPORATE SOURCE: Proskelia Pharmaceuticals, Romainville, 93230, Fr.  
 SOURCE: Bone (San Diego, CA, United States) (2005), 36(4), 585-598  
 CODEN: BONEDL; ISSN: 8756-3282  
 PUBLISHER: Elsevier  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB: Wnt/ $\beta$ -catenin signaling is involved in a large variety of modeling and remodeling processes including cell polarity, cell differentiation, and cell migration. Recently, a role of the Wnt pathway in bone biol. has been demonstrated. However, the precise mechanism by which Wnt proteins regulate bone formation still remains to be elucidated. We have previously shown that the Wnt pathway mediates induction of alkaline phosphatase, an osteoblast differentiation marker, in the pluripotent mesenchymal cells C3H10T1/2. In the present study, we performed a genome-wide expression anal. using Affymetrix oligonucleotide chips to determine the Wnt3a-induced gene expression profile in C3H10T1/2 cells. The expression profiles of 447 Wnt3a-regulated genes, classified into distinct functional families, are presented here. Our data reveal that Wnt3a regulates several genes that are involved in osteoblast and adipocyte differentiation. Importantly, Wnt3a induces the expression of osteoprotegerin by a  $\beta$ -catenin dependent mechanism indicating that the Wnt pathway may also affect osteoclastogenesis. Through the anal. of our expression profiling data, we have established a TagMan panel as a tool to rapidly compare the expression profiles of a specific set of genes induced by distinct stimuli acting in the Wnt/ $\beta$ -catenin pathway. Using the TagMan panel, we have compared the gene expression profiles induced by Wnt1, Wnt2, and Wnt3a in C3H10T1/2 cells, and also by two different GSK-3 $\beta$  inhibitors, LiCl and SB216763. Our data show that Wnt1 and Wnt3a act in a similar manner, distinct from Wnt2. Finally, we find that LiCl and SB216763 displayed different profiles in the TagMan panel evidencing their distinct inhibitory action toward GSK-3 $\beta$ . Overall, data presented herein will aid further understanding of the involvement of the Wnt signaling pathway in its regulation of osteoblast and adipocyte differentiation and function and, in addition, will enhance current knowledge of the Wnt signaling pathway itself.

IT 280744-09-4, SB216763  
 RL: BSU (Biological study, unclassified); BIOL (Biological study) (effect on gene expression profile; gene array anal. of Wnt-regulated genes during osteoblast and adipocyte differentiation of pluripotent mesenchymal C3H10T1/2 cells)  
 RN 280744-09-4 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

L6 ANSWER 17 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 Me  
  
 REFERENCE COUNT: 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

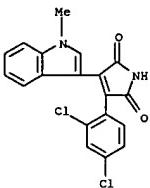
L6 ANSWER 18 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 ACCESSION NUMBER: 2005:301248 CAPLUS  
 DOCUMENT NUMBER: 143:257354  
 TITLE: 3-(1H-Indol-3-yl)-4-(3,4,5-trimethoxyphenyl)-2,5-dihydro-1H-pyrrole-2,5-dione  
 AUTHOR(S): Peifer, Christian; Schollmeyer, Dieter; Dannhardt, Gerd  
 CORPORATE SOURCE: Pharmazeutisches Institut, Universitaet Tuebingen, Tuebingen, 72076, Germany  
 SOURCE: Acta Crystallographica, Section E: Structure Reports Online (2005), E61(3), o721-o723  
 CODEN: ACSEBH; ISSN: 1600-5368  
 URL: <http://journals.iucr.org/e/issues/2005/03/00/bt6600/index.html>  
 PUBLISHER: Blackwell Publishing Ltd.  
 DOCUMENT TYPE: Journal; (online computer file)  
 LANGUAGE: English  
 AB: The crystal structure of the title compound, C21H18N2O5, was determined to study the electrocyclic reactivity of 3,4-diaryl-1H-pyrrole-2,5-dione derivs. Crystallog. data are given. Intermol. H bonds form sheets.

IT 863223-52-3  
 RL: PRP (Properties)  
 (crystal structure of)  
 RN 863223-52-3 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-(3,4,5-trimethoxyphenyl)- (9CI) (CA INDEX NAME)



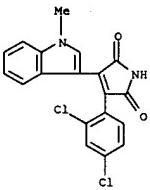
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 19 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2005:296082 CAPLUS  
 DOCUMENT NUMBER: 143:146505  
 TITLE: Inhibition of glycogen synthase kinase-3 protects cells from intrinsic but not extrinsic oxidative stress.  
 AUTHOR(S): King, Taj D.; Jope, Richard S.  
 CORPORATE SOURCE: Department of Psychiatry and Behavioral Neurobiology, University of Alabama at Birmingham, Birmingham, AL, 35294-0017, USA  
 SOURCE: NeuroReport (2005), 16(6), 597-601  
 CODEN: NERPEZ; ISSN: 0959-4965  
 PUBLISHER: Lippincott Williams & Wilkins  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Oxidative stress is linked to neuronal dysfunction and death in many diseases. Glycogen synthase kinase-3 often promotes apoptosis, so this investigation tested whether glycogen synthase kinase-3 is linked to oxidative stress-induced apoptosis. Both intrinsic oxidative stress induced by the mitochondrial inhibitor rotenone and extrinsic oxidative stress induced by exogenously added H2O2 activated Bax, caspase-2, and caspase-3 in human neuroblastoma SK-SY5Y cells. Inhibitors of glycogen synthase kinase-3 blocked rotenone-induced, but not H2O2-induced, activation of both caspases, but not Bax activation. Thus, glycogen synthase kinase-3 is an important component of intrinsic oxidative stress-induced apoptosis that acts downstream of mitochondrial Bax activation, and there are substantial differences in the role of glycogen synthase kinase-3, and lithium's effects, in apoptotic signaling induced by intrinsic and extrinsic oxidative stress.  
 IT 280744-09-4, SB216763  
 RL: DMG (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (glycogen synthase kinase-3 inhibitor SB216763 protected mitochondrial inhibitor rotenone-induced intrinsic oxidative stress by inhibiting caspase-3 activation in human neuroblastoma SK-SY5Y cell)  
 RN 280744-09-4 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 20 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



L6 ANSWER 20 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2005:283611 CAPLUS  
 DOCUMENT NUMBER: 142:349105  
 TITLE: Methods and materials for identifying agents which modulate bone remodeling and agents identified thereby  
 INVENTOR(S): Chatterjee-Kishore, Moitreyee; Robinson, John A.; Bhat, Sheem M.; Bex, Frederick James, III  
 PATENT ASSIGNEE(S): Wyeth, John, and Brother Ltd., USA  
 SOURCE: PCT Int. Appl., 173 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005028678	A2	20050331	WO 2004-US17951	20040607
WO 2005028678	A3	20050909		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG				
CA 2526845	AA	20050331	CA 2004-2526845	20040607
			US 2003-476164P	P 20030606
			US 2003-501398P	P 20030910
			WO 2004-US17951	W 20040607

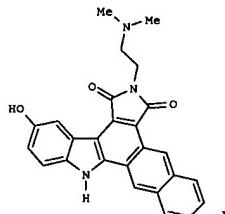
AB The invention discloses compns., compds., apparatuses and methods of using them to study bone mineralization and identify agents that regulate bone mineralization. Methods of using bone mineralization gene profiles and signatures for compound screening and research are also disclosed.

Reagents for modulating bone mineralization are provided for both therapeutic and research usage.

IT 280744-09-4  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (methods and materials for identifying agents which modulate bone remodeling and agents identified thereby)

RN 280744-09-4 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

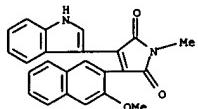
L6 ANSWER 21 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2005:128220 CAPLUS  
 DOCUMENT NUMBER: 142:373633  
 TITLE: Synthesis and biological evaluation of novel naphthocarbazoles as potential anticancer agents  
 AUTHOR(S): Routier, Sylvain; Peixoto, Paul; Merour, Jean-Yves; Couder, Gerard; Dias, Nathalie; Baillie, Christian; Pierre, Alain; Leonce, Stephane; Caignard, Daniel-Henry  
 CORPORATE SOURCE: Institut de Chimie Organique et Analytique, UMR CNRS 6005, Universite d'Orleans, Orleans, 45067, Fr.  
 SOURCE: Journal of Medicinal Chemistry (2005), 48(5), 1401-1413  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 142:373633  
 GI



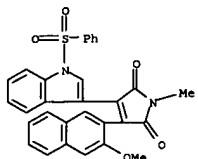
AB The efficient synthesis involving palladium-catalyzed reactions and biol. evaluation of naphthocarbazoles, e.g., I, designed as potential anticancer agents, are reported. The use of 5- and 6-benzyl oxyindoles generated three substitution sites which were successively exploited to introduce several hydrophilic side chains. The cytotoxicity of the designed compds. was evaluated on three cell lines. Several compds. showed a marked cytotoxicity with IC50 values in the sub-nanomolar range. This was the case for I, bearing a dimethylaminooethyl side chain, which was extremely cytotoxic to L1210 and DU145 cells (IC50: 36 nM, 108 nM) and induced an accumulation of L1210 cells in the G2/M phases of the cell cycle. Some of the most cytotoxic compds. were tested for inhibition of CDK-5, GSK-3 and topoisomerase I, and their interaction with DNA was also evaluated. Interaction with DNA was detected, suggesting that nucleic acids represent a privileged target for these mol.s.  
 IT 386235-54-7P 386235-55-6P 386235-59-2P 386235-60-5P 386235-58-1P 386235-59-2P 386235-60-5P 849404-38-2P 849404-39-3P 849404-41-7P

L6 ANSWER 21 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 849404-42-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (prepn. and anticancer activity of naphthocarbazole derivs. starting from indolyl(bromo)pyrroleidones and arylboronic acid or aryltin using cross-coupling reactions as the key steps)

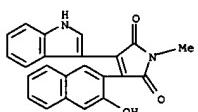
RN 386235-54-7 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-(3-methoxy-2-naphthalenyl)-1-methyl- (9CI) (CA INDEX NAME)



RN 386235-55-8 CAPLUS  
 CN 1H-Indole, 3-[2,5-dihydro-4-(3-methoxy-2-naphthalenyl)-1-methyl-2,5-dioxo-1H-pyrrol-3-yl]-1-(phenylsulfonyl)- (9CI) (CA INDEX NAME)

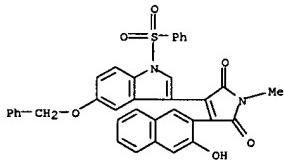


RN 386235-57-0 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(3-hydroxy-2-naphthalenyl)-4-(1H-indol-3-yl)-1-methyl- (9CI) (CA INDEX NAME)

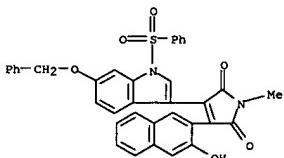


RN 386235-58-1 CAPLUS  
 CN 1H-Indole, 3-[2,5-dihydro-4-(3-hydroxy-2-naphthalenyl)-1-methyl-2,5-dioxo-1H-pyrrol-3-yl]-1-(phenylsulfonyl)- (9CI) (CA INDEX NAME)

L6 ANSWER 21 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 1H-Indole,  
 3-[2,5-dihydro-4-(3-hydroxy-2-naphthalenyl)-1-methyl-2,5-dioxo-1H-pyrrol-3-yl]-5-(phenylmethoxy)-1-(phenylsulfonyl)- (9CI) (CA INDEX NAME)

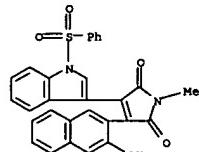


RN 849404-39-3 CAPLUS  
 CN 1H-Indole, 3-[2,5-dihydro-4-(3-hydroxy-2-naphthalenyl)-1-methyl-2,5-dioxo-1H-pyrrol-3-yl]-6-(phenylmethoxy)-1-(phenylsulfonyl)- (9CI) (CA INDEX NAME)

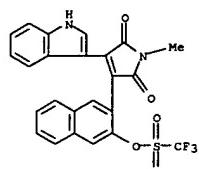


RN 849404-41-7 CAPLUS  
 CN Methanesulfonic acid, trifluoro-, 3-[2,5-dihydro-1-methyl-2,5-dioxo-4-[5-(phenylmethoxy)-1-(phenylsulfonyl)-1H-indol-3-yl]-1H-pyrrol-3-yl]-2-naphthalenyl ester (9CI) (CA INDEX NAME)

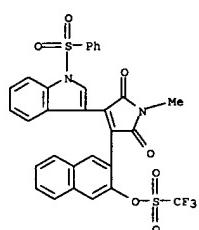
L6 ANSWER 21 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 386235-59-2 CAPLUS  
 CN Methanesulfonic acid, trifluoro-, 3-[2,5-dihydro-4-(1H-indol-3-yl)-1-methyl-2,5-dioxo-1H-pyrrol-3-yl]-2-naphthalenyl ester (9CI) (CA INDEX NAME)

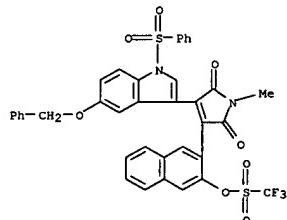


RN 386235-60-5 CAPLUS  
 CN Methanesulfonic acid, trifluoro-, 3-[2,5-dihydro-1-methyl-2,5-dioxo-4-(1-phenylsulfonyl)-1H-indol-3-yl]-1H-pyrrol-3-yl]-2-naphthalenyl ester (9CI) (CA INDEX NAME)

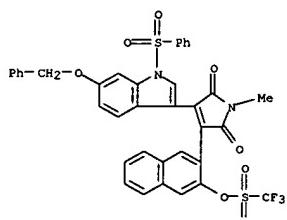


RN 849404-38-2 CAPLUS

L6 ANSWER 21 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 849404-42-8 CAPLUS  
 CN Methanesulfonic acid, trifluoro-, 3-[2,5-dihydro-1-methyl-2,5-dioxo-4-[6-(phenylmethoxy)-1-(phenylsulfonyl)-1H-indol-3-yl]-1H-pyrrol-3-yl]-2-naphthalenyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

ACCESSION NUMBER: 2004:1057908 CAPLUS

DOCUMENT NUMBER: 142:192931

TITLE: Exploitation of KESTREL to identify NDRG family members as physiological substrates for SGK1 and GSK3  
AUTHOR(S): Murray, James T.; Campbell, David G.; Morris, Nicholas; Auld, Gillian C.; Shpiro, Natalia; Marquez, Rodolfo; Peggie, Mark; Bain, Jenny; Bloomberg,

Graham B.; Grähamer, Florian; Lang, Florian; Wulff, Peer; Kuhl, Dietmar; Cohen, Philip

CORPORATE SOURCE: MRC Protein Phosphorylation Unit, School of Life Sciences, University of Dundee, Dundee, DD1 5EH, UK

SOURCE: Biochemical Journal (2004), 384(3), 477-488

CODEN: BIJOAK; ISSN: 0264-6021

PUBLISHER: Portland Press Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB We detected a protein in rabbit skeletal muscle exts. that was phosphorylated rapidly by SGK1 (serum- and glucocorticoid-induced kinase 1), but not by protein kinase Ba, and identified it as NDRG2 (N-myc downstream-regulated gene 2). SGK1 phosphorylated NDRG2 at Thr330,

Ser332 and Thr348 in vitro. All three residues were phosphorylated in skeletal muscle from wild-type mice, but not from mice that do not express SGK1. SGK1 also phosphorylated the related NDRG1 isoform at Thr326, Ser330 and Thr346 (equivalent to Thr330, Ser332 and Thr348 of NDRG2), as well as

Thr356 and Thr366. Residues Thr346, Thr356 and Thr366 are located within identical decapeptide sequences GTRSRSHTSE, repeated three times in

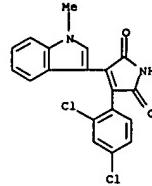
NDRG1. These threonines were phosphorylated in NDRG1 in the liver, lung, spleen and skeletal muscle of wild-type mice, but not in SGK1-/- mice. Knock-down of SGK1 in HeLa cells using small interfering RNA also suppressed phosphorylation of the threonine residues in the repeat region of NDRG1. The phosphorylation of NDRG1 by SGK1 transformed it into an excellent substrate for GSK3 (glycogen synthase kinase 3), which could then phosphorylate Ser342, Ser352 and Ser366 in the repeat region. Incubation of HeLa cells with the specific GSK3 inhibitor CT 99021 increased the electrophoretic mobility of NDRG1 in HeLa cells, demonstrating that this protein is phosphorylated by GSK3 in cells. Our results identify NDRG1 and NDRG2 as physiol. substrates for SGK1, and demonstrate that phosphorylation of NDRG1 by SGK1 primes it for phosphorylation by GSK3.

IT 280744-09-4, SB 216763

RL: BSU (Biological study, unclassified); BIOL (Biological study) (phosphorylation of NDRG1 in liver, lung, spleen and skeletal muscle by serum/glucocorticoid-inducible protein kinase 1)

RN 280744-09-4 CAPLUS

CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: THIS

52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ACCESSION NUMBER: 2004:916807 CAPLUS

DOCUMENT NUMBER: 142:232469

TITLE: Involvement of c-Myc in growth inhibition of Hep 3B human hepatoma cells by a vitamin K analog

AUTHOR(S): Ge, Lisheng; Wang, Ziqiu; Wang, Meifang; Kar, Siddhartha; Carr, Brian I.

CORPORATE SOURCE: Department of Surgery, Liver Cancer Center, Starzl Transplant Institute, School of Medicine, University of Pittsburgh, Pittsburgh, PA, 15213, USA

SOURCE: Journal of Hepatology (2004), 41(5), 823-829

CODEN: JOHEEC; ISSN: 0168-8278

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Background/Aims: A synthetic vitamin K analog, compound 5 (Cpd 5), is a potent inhibitor of cell growth. The aim was to investigate whether

c-Myc was involved in Cpd 5-induced cell growth inhibition. Methods: Human hepatoma cells (Hep 3B) were cultured and treated with Cpd 5, and c-Myc protein expression and phosphorylation were investigated using Western blot analysis. Results: Cpd 5 was found to inhibit c-Myc protein expression and induce c-Myc phosphorylation in Hep 3B cells. The phosphorylation of c-Myc was induced by both Cpd 5-mediated persistent extracellular signal-regulated kinase (ERK) phosphorylation and Cpd 5 increased

glycogen synthase kinase-3 (GSK-3) activity. When using GSK-3 inhibitor,

SB216763, c-Myc phosphorylation was significantly decreased and c-Myc levels were restored in Cpd 5 treated cells, suggesting that Cpd 5-mediated increase of GSK-3 activity enhanced c-Myc degradation and resulted in reduction of c-Myc

levels. The lower c-Myc levels were found to cause altered expression of two c-Myc target genes, growth arrest gene gadd45 and ornithine decarboxylase (ODC). Conclusions: The results suggest that Cpd

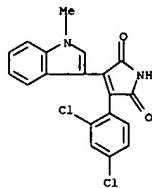
5-mediated c-Myc phosphorylation resulted in enhanced c-Myc protein degradation and reduced c-Myc protein levels, which may contribute to cell growth inhibition by Cpd 5.

IT 280744-09-4, SB216763

RL: BSU (Biological study, unclassified); BIOL (Biological study) (Cpd 5 induction of c-Myc phosphorylation was antagonized by GSK inhibitor SB216763 and in combination with MEK inhibitor U0126 Cpd 5 action was further decreased in human hepatoma Hep 3B cells)

RN 280744-09-4 CAPLUS

CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: THIS

30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

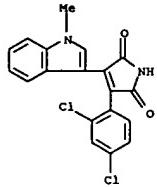
L6 ANSWER 24 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2004:902218 CAPLUS  
 DOCUMENT NUMBER: 141:400891  
 TITLE: Drug for nerve regeneration containing glycogen synthase kinase-3 inhibitors  
 INVENTOR(S): Morishita, Tuyoshi; Sakurada, Kazuhiko; Suzuki, Keiko; Ikeda, Shunichi  
 PATENT ASSIGNEE(S): Kyowa Hakko Kogyo Co., Ltd., Japan  
 SOURCE: PCT Int. Appl., 115 pp.  
 CODEN: PIXKD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004091663	A1	20041028	WO 2004-JP5503	20040416
W: AS, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, US, UZ, VC, VN, YU, ZA, ZM, ZW, RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CH, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TO				
CA 2522712	AA	20041028	CA 2004-2522712	20040416
PRIORITY APPLN. INFO.:			JP 2003-114579	A 20030418
		WO 2004-JP5503		W 20040416

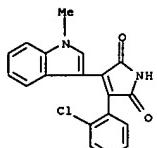
OTHER SOURCE(S): MARPAT 141:400891  
 AB It is intended to provide a drug for nerve degeneration, a nerve stem cell neurogenesis promoter, a neuron obtained by culturing a nerve stem cell in the presence of the neurogenesis promoter, and a method of producing the neuron. To achieve the above objects, a drug for nerve degeneration which contains as the active ingredient a substance inhibiting the activity of a glycogen synthase kinase-3, a nerve stem cell neurogenesis promoter containing this substance as the active ingredient, a neuron obtained by culturing a nerve stem cell in the presence of the neurogenesis promoter, and a method of producing the neuron are provided. The above-described drugs are useful as remedies for nerve diseases such as Parkinson's disease, Alzheimer's disease, Down's disease, cerebrovascular disorder, cerebral stroke, spinal injury, Huntington's chorea, multiple sclerosis, amyotrophic lateral sclerosis, epilepsy, anxiety disorder, integration dysfunction syndrome, depression and manic-depressive. The effects of lithium chloride, Xzapallone, Indirubin-3'-monoxime, and short interference RNA (siRNA) on neurogenesis promotion were *in vitro* tested. Also, a tablet SB-216763 5 mg/100 mg tablet was formulated.

IT 280744-09-4P, SB 216763  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

L6 ANSWER 24 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 ACCESSION NUMBER: 2004:902218 CAPLUS  
 DOCUMENT NUMBER: 141:400891  
 TITLE: (glycogen synthase kinase-3 inhibitors for nerve regeneration)  
 RN 280744-09-4 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)-(9CI) (CA INDEX NAME)

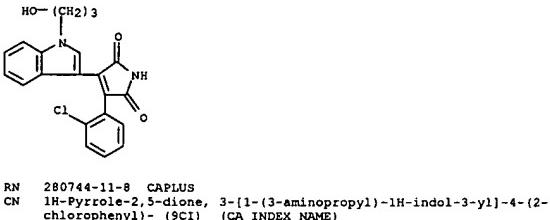


IT 125314-07-0 280744-10-8  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (glycogen synthase kinase-3 inhibitors for nerve regeneration)  
 RN 125314-07-0 CAPLUS  
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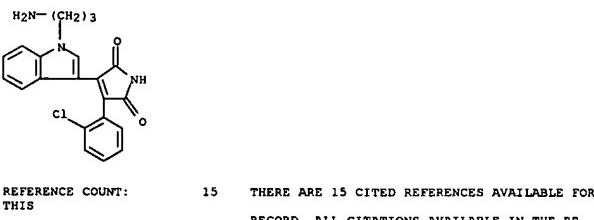


RN 280744-10-7 CAPLUS  
 CN 1H-Pyrrole-2,5-dione,  
 3-(2-chlorophenyl)-4-(1-(3-hydroxypropyl)-1H-indol-3-yl)-(9CI) (CA INDEX NAME)

L6 ANSWER 24 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 280744-11-8 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(1-(3-aminopropyl)-1H-indol-3-yl)-4-(2-chlorophenyl)-(9CI) (CA INDEX NAME)



REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

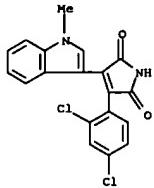
L6 ANSWER 25 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2004:839779 CAPLUS  
 DOCUMENT NUMBER: 141:360317  
 TITLE: Inhibition of glycogen synthase kinase-3 represses androgen receptor activity and prostate cancer cell growth

AUTHOR(S): Mazor, Michal; Kawano, Yoshiaki; Zhu, Hanneng; Waxman,

CORPORATE SOURCE: Prostate Cancer Research Group, Department of Cancer Cell Biology, Division of Medicine, Imperial College, London, W12 0NN, UK  
 SOURCE: Oncogene (2004), 23(47), 7882-7892  
 PUBLISHER: Nature Publishing Group  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB The transcriptional activity of the androgen receptor (AR) is regulated by

interaction with various coregulators, one of which is  $\beta$ -catenin. Interest in the role of  $\beta$ -catenin in prostate cancer has been stimulated by reports showing that it is aberrantly expressed in the cytoplasm and/or nucleus in up to 38% of hormone-refractory tumors and that overexpression of  $\beta$ -catenin results in activation of AR transcriptional activity. We have examined the effect of depleting endogenous  $\beta$ -catenin on AR activity using Axin and RNA interference. Axin, which promotes  $\beta$ -catenin degradation, inhibited AR transcriptional activity. However, this did not require the  $\beta$ -catenin-binding domain of Axin. Depletion of  $\beta$ -catenin using RNA interference increased, rather than decreased, AR activity, suggesting that endogenous  $\beta$ -catenin is not a transcriptional coactivator for the AR. The glycogen synthase kinase-3 (GSK-3)-binding domain of Axin prevented formation of a GSK-3-AR complex and was both necessary and sufficient for inhibition of AR-dependent transcription. A second GSK-3-binding protein, PRAT, also inhibited AR transcriptional activity, as did the GSK-3 inhibitors SB216763 and SB415286. Finally, inhibition of GSK-3 reduced the growth of AR-expressing prostate cancer cell lines. Our observations suggest potential new therapeutic application for GSK-3 inhibitors in prostate cancer.

IT 280744-09-4, SB216763  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (inhibition of GSK3 represses AR activity and prostate cancer cell growth)  
 RN 280744-09-4 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)-(9CI) (CA INDEX NAME)



REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L6 ANSWER 26 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2004:696367 CAPLUS  
DOCUMENT NUMBER: 141:225308  
TITLE: Preparation of indolylmaleimides for preventing or treating disorders or diseases mediated by T lymphocytes and/or PKC or GSK-3 $\beta$   
INVENTOR(S): Von Matt, Peter; Wagner, Juergen  
PATENT ASSIGNEE(S): Novartis AG, Switz.; Novartis Pharma GmbH  
SOURCE: PCT Int. Appl., 28 pp.  
CODEN: PIXDZ2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004072062	A2	20040826	WO 2004-EPI323	20040212
WO 2004072062	A3	20041104		
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CA 2513613	RA	20040826	CA 2004-2513613	20040212
EP 1597250	A2	20051123	EP 2004-710393	20040212
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
PRIORITY APPLN. INFO.: GB 2003-3319				A 20030213
			WO 2004-EPI323	W 20040212

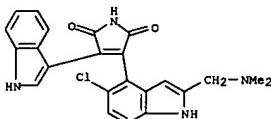
OTHER SOURCE(S): MARPAT 141:225308  
GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

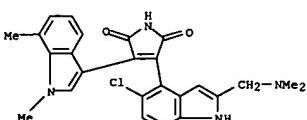
AB The title compds. [I; R<sub>a</sub> = H, alkyl, hydroxylalkyl, aminoalkyl, etc.; R<sub>b</sub> = H, halo, alkyl, alkoxy; R = II, III (wherein R<sub>1</sub>, R<sub>3</sub> = heterocyclyl), XRCY; X = direct bond, O, S, NR11; R11 = H, alkyl; R<sub>c</sub> = (un)substituted alkylene; Y = OH, (un)substituted NH<sub>2</sub>, etc.; R<sub>2</sub>, R<sub>4</sub> = H, halo, alkyl, alkoxy, CF<sub>3</sub>, CN, NO<sub>2</sub>, NH<sub>2</sub>)] were prepared E.g., a multi-step synthesis of IV which showed, for example, IC<sub>50</sub> of 5.4 nM against PKC $\delta$  and IC<sub>50</sub> of 18 nM against GSK-3 $\beta$ , is given. The pharmaceutical composition comprising the compound I is claimed.

IT 748153-05-1P 748153-06-2P 748153-07-3P  
748153-08-4P 748153-09-5P 748153-10-6P  
748153-11-9P 748153-12-0P 748153-13-1P  
748153-14-2P 748153-15-3P 748153-16-4P  
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748153-20-0P 748153-21-1P 748153-22-2P  
748153-23-3P 748153-24-4P 748153-25-5P  
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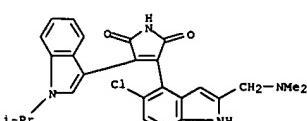
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748153-41-5P 748153-42-6P 748153-43-7P  
748153-44-8P  
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of indolylmaleimides for preventing or treating disorders or diseases mediated by T lymphocytes and/or PKC or GSK-3 $\beta$ )  
RN 748153-05-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[5-chloro-2-[(dimethylamino)methyl]-1H-indol-4-yl]-  
4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



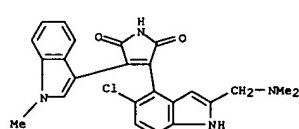
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3-[5-chloro-2-[(dimethylamino)methyl]-1H-indol-4-yl]-  
4-(1,7-dimethyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



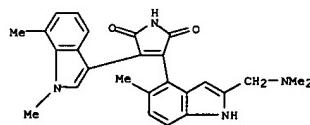
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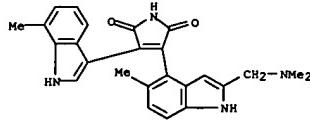
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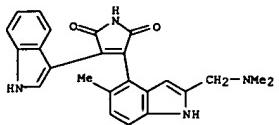
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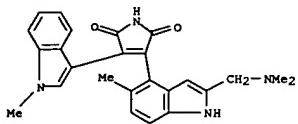
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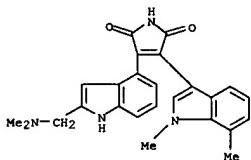
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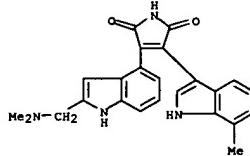
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4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



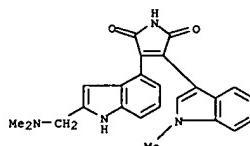
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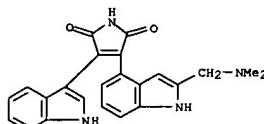
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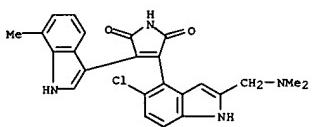
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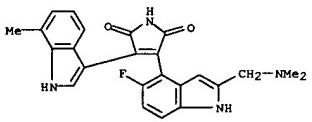
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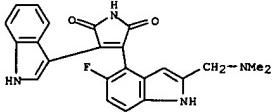
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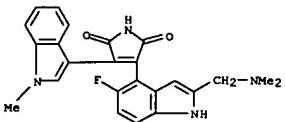
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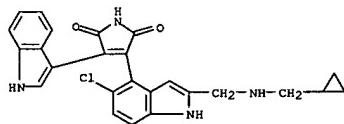
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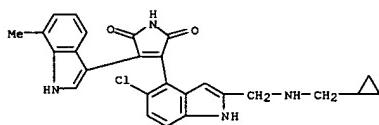
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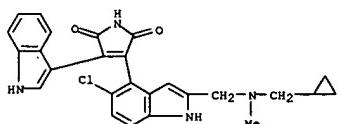
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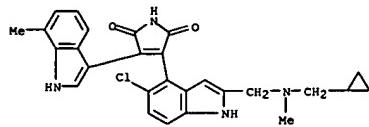
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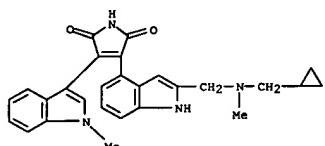
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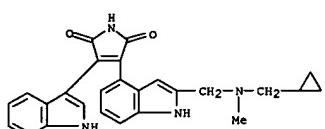
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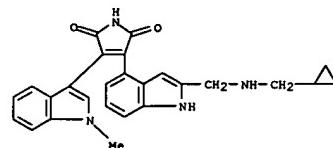
RN 748153-25-5 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[2-[(cyclopropylmethyl)amino]methyl]-1H-indol-4-yl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



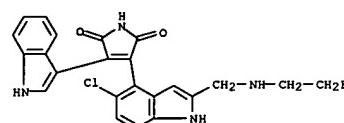
RN 748153-26-6 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[2-[(cyclopropylmethyl)amino]methyl]-1H-indol-4-yl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



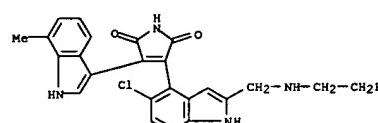
RN 748153-27-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[2-[(cyclopropylmethyl)amino]methyl]-1H-indol-4-yl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



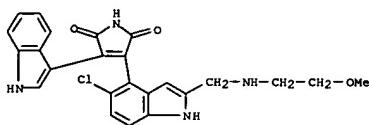
RN 748153-28-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-2-[(2-fluoroethyl)amino]methyl]-1H-indol-4-yl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



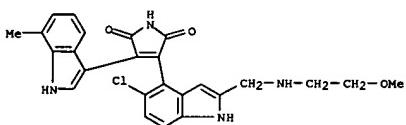
RN 748153-29-9 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-2-[(2-fluoroethyl)amino]methyl]-1H-indol-4-yl]-4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



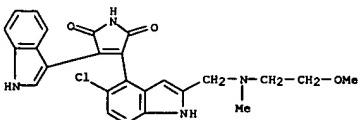
RN 748153-30-2 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-2-[(2-methoxyethyl)amino]methyl]-1H-indol-4-yl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



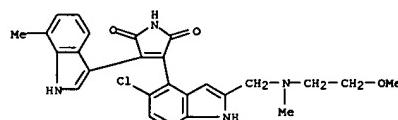
RN 748153-31-3 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-2-[(2-methoxyethyl)amino]methyl]-1H-indol-4-yl]-4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



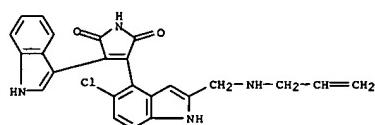
RN 748153-32-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-2-[(2-methoxyethyl)amino]methyl]-1H-indol-4-yl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 748153-33-5 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-2-[(2-methoxyethyl)amino]methyl]-1H-indol-4-yl]-4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



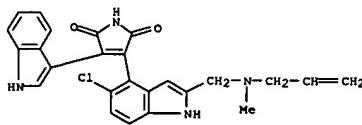
RN 748153-34-6 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-2-[(2-propenylamino)methyl]-1H-indol-4-yl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



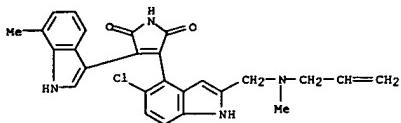
RN 748153-35-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-2-[(2-propenylamino)methyl]-1H-indol-4-yl]-4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



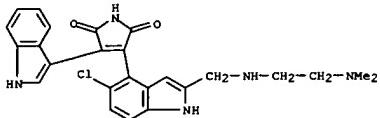
RN 748153-36-8 CAPLUS  
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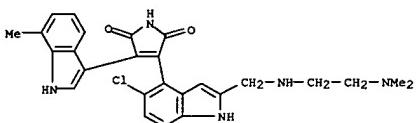
L6 ANSWER 26 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
RN 748153-37-9 CAPLUS  
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RN 748153-38-0 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-2-[(2-(dimethylamino)ethylamino)methyl]-1H-indol-4-yl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)

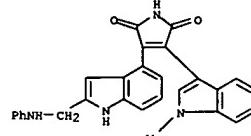


RN 748153-39-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-2-[(2-(dimethylamino)ethylamino)methyl]-1H-indol-4-yl]-4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

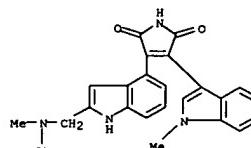


RN 748153-40-4 CAPLUS  
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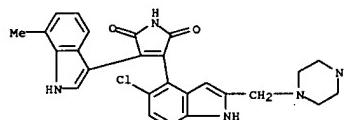
L6 ANSWER 26 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 748153-41-5 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[1-methyl-1H-indol-3-yl]-4-[(methylphenylamino)methyl]-1H-indol-4-yl)- (9CI) (CA INDEX NAME)

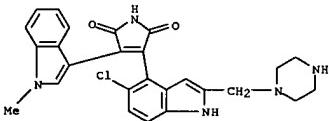


RN 748153-42-6 CAPLUS  
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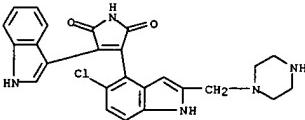


RN 748153-43-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-2-(1-piperazinylmethyl)-1H-indol-4-yl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

L6 ANSWER 26 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 748153-44-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-2-(1-piperazinylmethyl)-1H-indol-4-yl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



L6 ANSWER 27 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2004:286907 CAPLUS  
DOCUMENT NUMBER: 140:368533

TITLE: Opiod-Induced Cardioprotection Occurs via Glycogen Synthase Kinase  $\beta$  Inhibition During Reperfusion in Intact Rat Hearts

AUTHOR(S): Gross, Eric R.; Hsu, Anna K.; Gross, Garrett J.  
CORPORATE SOURCE: Medical College of Wisconsin, Department of Pharmacology and Toxicology, Milwaukee, WI, 53226, USA

SOURCE: Circulation Research (2004), 94(7), 960-966  
CODEN: CIRUR; ISSN: 0009-7330

PUBLISHER: Lippincott Williams & Wilkins

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Glycogen synthase kinase GSK inhibition produced by ischemic preconditioning has been previously shown to be regulated through phosphatidylinositol-3 kinase PI3K. Therefore, we determined whether opioid-induced cardioprotection (OIC) occurs during reperfusion by altering GSK phosphorylation through PI3K and target of rapamycin (TOR). Furthermore, we determined if selective GSK inhibitors, SB216763(SB21) or SB415286(SB41), emulate OIC. Rats were treated with the nonselective opioid agonist, morphine (MOR, 0.3 mg/kg), or the  $\delta$ -selective opioid agonist BW373U86 (BW, 1 mg/kg), or the GSK inhibitors, SB21 (0.6 mg/kg)

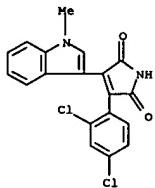
or SB41 (1.0 mg/kg), either 10 min before ischemia or 5 min before reperfusion. Five minutes before opioid or SB21 treatment, some rats received either the PI3K inhibitor wortmannin (15  $\mu$ g/kg) or LY294002 (0.3 mg/kg) or the TOR inhibitor rapamycin (3  $\mu$ g/kg). After 30 min of ischemia followed by 2 h of reperfusion, infarct size was assessed. MOR, BW, SB41, and SB21 reduced infarct size compared with vehicle when administered before ischemia (42.9±2.6, 40.32±2.3, 46.6±1.6, 42.21±1.8 vs. 60.0±1.1, resp.;  $P<0.001$ ) and showed similar protection when administered 5 min before reperfusion (43.6±2.3, 40.8±2.6, 44.8±2.8, 39.4±0.8, resp.;  $P<0.001$ ). Wortmannin, LY294002, and rapamycin were found to inhibit OIC; however, they did not abrogate SB21-induced infarct size reduction. At 5 min of reperfusion, both

MOR and BW increased P-GSK $\beta$  at Ser9 in the ischemic zone compared with vehicle (181±20, 178±15 vs. 75±17 DU, resp.;  $P<0.05$ ), and this effect was abrogated by prior administration of wortmannin or rapamycin in MOR-treated rats. Furthermore, no differences were seen in phosphorylation of GSK $\alpha$  (Ser21 or Tyr279) or phosphorylation of GSK $\beta$  (Tyr216). These data indicate that OIC occurs via the phosphorylation of GSK $\beta$  at Ser9 during reperfusion.

IT 280744-09-4, SB216763

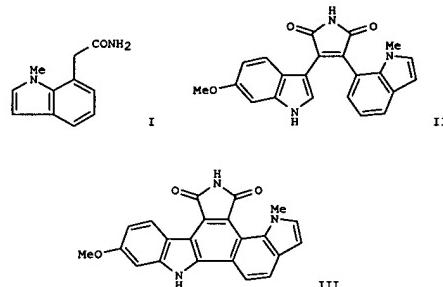
RL: PAC (Pharmacological activity); BIOL (Biological study)  
(opioid-induced cardioprotection mediation by GSK- $\beta$  at Ser9 during reperfusion)

RN 280744-09-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



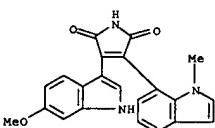
REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L6 ANSWER 28 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2004-261266 CAPLUS  
DOCUMENT NUMBER: 141:7051  
TITLE: Synthetic Approaches to Indolo[6,7-a]pyrrolo[3,4-c]carbazoles: Potent Cyclin D1/CDK4 Inhibitors  
AUTHOR(S): Paul, Margaret M.; Engler, Thomas A.; Sullivan, Kevin A.; Grutsch, John L.; Clayton, Marcella T.; Martinelli, Michael J.; Pawlak, Joseph M.; LeTourneau, Michael; Coffey, D. Scott; Pedersen, Steven W.; Kolis, Stanley P.; Furness, Kelly; Malhotra, Sushant; Al-Awar, Rima S.; Ray, James E.  
CORPORATE SOURCE: Global Chemical Process Research and Development, Indianapolis, IN, 46285, USA  
SOURCE: Journal of Organic Chemistry (2004), 69(9), 2967-2975  
PUBLISHER: American Chemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 141:7051  
GI

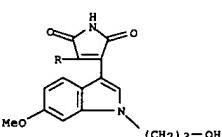


AB Synthesis of indolo[6,7-a]pyrrolo[3,4-c]carbazoles, a new class of cyclin D1/CDK4 inhibitors, by oxidation of the corresponding aryl (indolyl)maleimides, are described. Two approaches to the synthesis of (indolyl)maleimides were identified that required new methods for the synthesis of 7-substituted indoleacetamides and N-methyl(7-indolyl)oxoacetates. The chemical developed enabled introduction of functionality (-OR, NR<sub>2</sub>) at C12 and N13 facilitating structure-activity relationship (SAR) evaluation of this indolo[6,7-a]pyrrolo[3,4-c]carbazole platform. Biol. test data for the compds. prepared for this study were not reported. The reaction of 1-methyl-1H-indole-7-acetamide (I) with 6-methoxy-a-oxo-1H-indole-3-acetic acid Me ester gave 3-(6-methoxy-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)-1H-pyrrole-2,5-dione (II). Further photochem. cyclization of II gave 9-methoxy-3-methyl-3H-indolo[6,7-a]pyrrolo[3,4-c]carbazole (III).

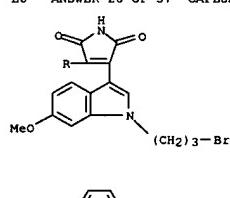
IT 408354-39-2P, 3-(6-Methoxy-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408354-72-3P, 3-[1-(3-Hydroxypropyl)-6-methoxy-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408355-60-2P, 3-[1-(3-Bromopropyl)-6-methoxy-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408355-62-8P, 3-[7-(2-Bromoethyl)-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408355-83-9P, 3-[7-(2-Hydroxyethyl)-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione RN: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of indolo[6,7-a]pyrrolo[3,4-c]carbazoles (cyclin D1/CDK4 protein kinase inhibitors))  
RN 408354-39-2 CAPLUS  
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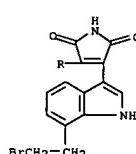
RN 408354-72-3 CAPLUS  
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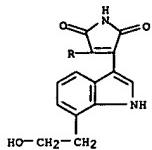
RN 408355-60-2 CAPLUS  
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RN 408355-83-9 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[7-(2-bromoethyl)-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



RN 408355-83-9 CAPLUS  
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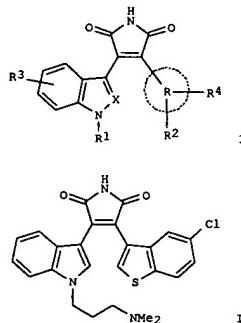
REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT



L6 ANSWER 29 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2003-991343 CAPLUS  
 DOCUMENT NUMBER: 140:42028  
 TITLE: Preparation of substituted 1H-pyrrole-2,5-diones as kinase inhibitors  
 INVENTOR(S): Zhang, Han-cheng; Maryanoff, Bruce E.; McComsey, David  
 F.: White, Kimberly; Ye, Hong; Hecker, Leonard; Conway, Bruce R.; Demarest, Keith  
 PATENT ASSIGNEE(S): Janssen Pharmaceutica N.V., Belg.  
 SOURCE: PCT Int. Appl., 101 pp.  
 CODEN: PIXKD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003103663	A2	20031218	WO 2003-US17518	20030604
WO 2003103663	A3	20040708		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, T2, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2488798	AA	20031218	CA 2003-2488798	20030604
AU 2003240517	A1	20031222	AU 2003-240517	20030604
US 2004054180	A1	20040318	US 2003-454561	20030604
EP 1513520	A2	20050316	EP 2003-731528	20030604
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2005531607	T2	20051020	JP 2004-510782	20030604
PRIORITY APPLN. INFO.:			US 2002-386002P	P 20020605
			WO 2003-US17518	W 20030604

OTHER SOURCE(S): MARPAT 140:42028  
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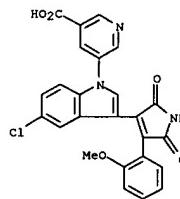


AB The title compds. (I; R = Ph, naphthyl, furyl, thiienyl, etc.; R1 = H, (un)substituted alkyl, alkenyl, aryl, etc.; R2 = H, (un)substituted alkyl, alkenyl, CONH2, etc.; R3 = H, CHO, CONH2, CO2H, etc.; R4 = H, (un)substituted alkyl, CHO, CO2H, etc.; X = N, CR11; R11 = H, halo, (un)substituted alkyl, aryl, etc.), useful as protein kinase C or glycogen synthase kinase-3B inhibitors, were prepared. E.g., a multi-step synthesis of II (starting from (5-chlorobenzo[b]thien-3-yl)acetic acid, and 2-(3-indolyl)-2-oxoacetic acid) which showed IC50 of 0.081 μM and 0.083 μM against PKC-β-II and PKC-α, resp., was given. The pharmaceutical composition comprising the compound I is claimed.

IT 634604-97-0P 634604-61-8P 634604-62-9P 634604-64-1P  
 634604-66-3P 634604-68-5P 634604-69-6P  
 634604-70-9P 634604-72-1P 634604-73-2P  
 634604-75-4P 634604-77-6P 634604-79-8P  
 634604-81-2P 634604-83-4P 634604-85-6P  
 634604-87-8P 634604-89-0P 634604-91-4P  
 634604-92-5P 634604-93-6P 634604-96-9P  
 634604-98-1P 634604-99-2P 634605-00-8P  
 634605-01-9P 634605-02-0P 634605-03-1P  
 634605-04-2P 634605-05-3P 634605-33-7P  
 634605-34-8P 634605-35-9P 634605-36-0P  
 634605-41-7P 634605-47-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of substituted 1H-pyrrole-2,5-diones as kinase inhibitors)

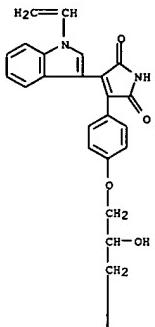
RN 634604-61-8 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(1-ethenyl-1H-indol-3-yl)-4-[4-(2-hydroxy-3-(1-piperidinyl)propoxy]phenyl]- (9CI) (CA INDEX NAME)



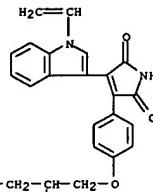
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 634605-01-9P 634605-02-0P 634605-03-1P  
 634605-04-2P 634605-05-3P 634605-33-7P  
 634605-34-8P 634605-35-9P 634605-36-0P  
 634605-41-7P 634605-47-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of substituted 1H-pyrrole-2,5-diones as kinase inhibitors)

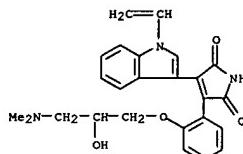
RN 634604-61-8 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(1-ethenyl-1H-indol-3-yl)-4-[4-(2-hydroxy-3-(1-piperidinyl)propoxy]phenyl]- (9CI) (CA INDEX NAME)



L6 ANSWER 29 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 RN 634604-64-1 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-[4-(3-(dimethylamino)-2-hydroxypropoxy)phenyl]-4-(1-ethenyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

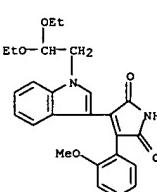
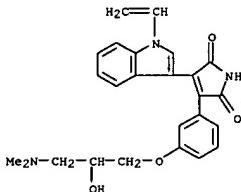


RN 634604-66-3 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-[2-(3-(dimethylamino)-2-hydroxypropoxy)phenyl]-4-(1-ethenyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

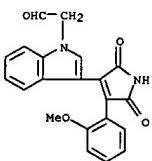


RN 634604-68-5 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-[1-(2,2-diethoxyethyl)-1H-indol-3-yl]-4-(2-methoxyphenyl)- (9CI) (CA INDEX NAME)

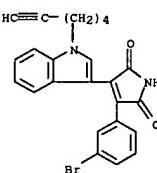
RN 634604-62-9 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-[3-(3-(dimethylamino)-2-hydroxypropoxy)phenyl]-4-(1-ethenyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



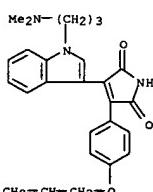
L6 ANSWER 29 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 RN 634604-69-6 CAPLUS  
 CN 1H-Indole-1-acetaldehyde,  
 3-[2,5-dihydro-4-(2-methoxyphenyl)-2,5-dioxo-1H-pyrol-3-yl]- (9CI) (CA INDEX NAME)



L6 ANSWER 29 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 RN 634604-70-9 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[4-(2-(methylamino)ethoxy)phenyl]- (9CI) (CA INDEX NAME)

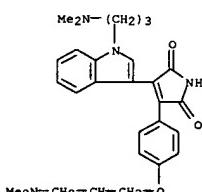
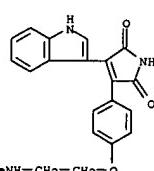


RN 634604-75-4 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-[4-(3-(dimethylamino)-2-hydroxypropoxy)phenyl]-4-[1-(3-(dimethylamino)propyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



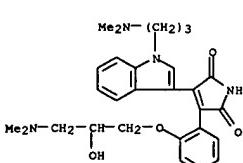
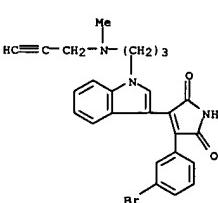
RN 634604-77-6 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-[2-(3-(dimethylamino)-2-hydroxypropoxy)phenyl]-4-[1-(3-(dimethylamino)propyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

RN 634604-70-9 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[4-(2-(methylamino)ethoxy)phenyl]- (9CI) (CA INDEX NAME)



RN 634604-77-6 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-[2-(3-(dimethylamino)-2-hydroxypropoxy)phenyl]-4-[1-(3-(dimethylamino)propyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

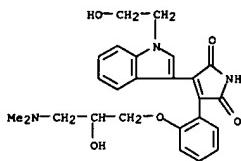
RN 634604-72-1 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(3-bromophenyl)-4-[1-(3-(methyl-2-propynylamino)propyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



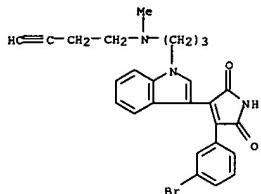
RN 634604-79-8 CAPLUS  
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RN 634604-73-2 CAPLUS

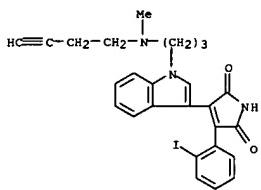
L6 ANSWER 29 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 [1-(2-hydroxyethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



RN 634604-81-2 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(3-bromophenyl)-4-[1-[3-(3-butynylmethylamino)propyl]-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

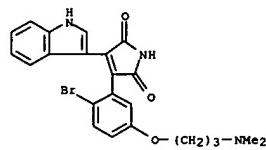


RN 634604-83-4 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(1-(3-(3-butynylmethylamino)propyl)-1H-indol-3-yl)-4-(2-iodophenyl)- (9CI) (CA INDEX NAME)

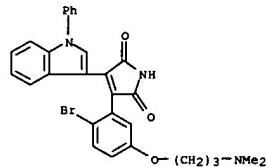


RN 634604-85-6 CAPLUS  
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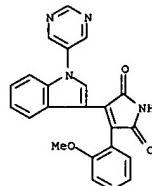
L6 ANSWER 29 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 indol-3-yl)- (9CI) (CA INDEX NAME)



RN 634604-87-8 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-[2-bromo-5-[3-(dimethylamino)propoxy]phenyl]-4-(1-phenyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

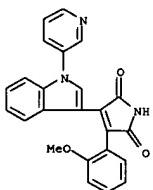


RN 634604-89-0 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(2-methoxyphenyl)-4-(1-(5-pyrimidinyl)-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

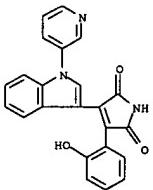


RN 634604-91-4 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(2-methoxyphenyl)-4-(1-(3-pyridinyl)-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

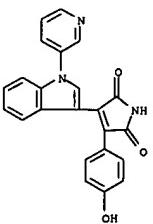
L6 ANSWER 29 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 634604-92-5 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(2-hydroxyphenyl)-4-(1-(3-pyridinyl)-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

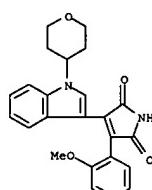


RN 634604-93-6 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(4-hydroxyphenyl)-4-(1-(3-pyridinyl)-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

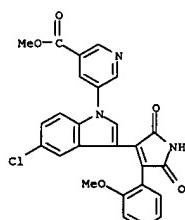


RN 634604-96-9 CAPLUS

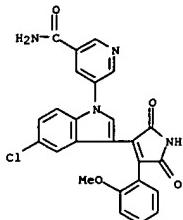
L6 ANSWER 29 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 CN 1H-Pyrrole-2,5-dione, 3-(2-methoxyphenyl)-4-[1-(tetrahydro-2H-pyran-4-yl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



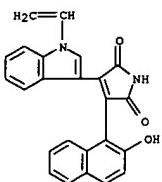
RN 634604-98-1 CAPLUS  
 CN 3-Pyridinecarboxylic acid, 5-(5-chloro-3-[2,5-dihydro-4-(2-methoxyphenyl)-2,5-dioxo-1H-pyrrrol-3-yl]-1H-indol-1-yl)-, methyl ester (9CI) (CA INDEX NAME)



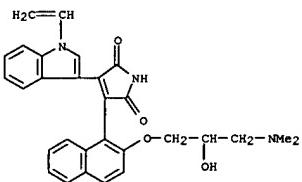
RN 634604-99-2 CAPLUS  
 CN 3-Pyridinecarboxamide, 5-(5-chloro-3-[2,5-dihydro-4-(2-methoxyphenyl)-2,5-dioxo-1H-pyrrrol-3-yl]-1H-indol-1-yl)- (9CI) (CA INDEX NAME)



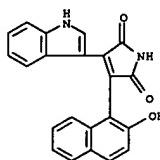
RN 634605-00-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1-ethenyl-1H-indol-3-yl)-4-(2-hydroxy-1-naphthalenyl)- (9CI) (CA INDEX NAME)



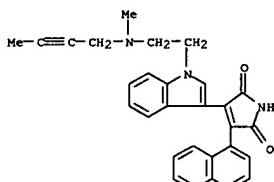
RN 634605-01-9 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(2-[3-(dimethylamino)-2-hydroxypropoxy]-1-naphthalenyl)-4-(1-ethenyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



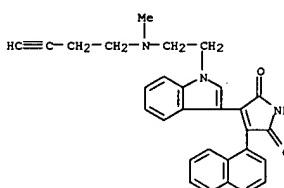
RN 634605-02-0 CAPLUS



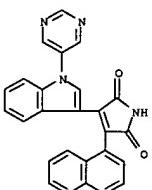
RN 634605-03-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[1-(2-(2-butylnylmethylamino)ethyl]-1H-indol-3-yl)-4-(1-naphthalenyl)- (9CI) (CA INDEX NAME)



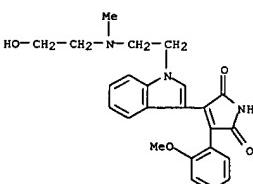
RN 634605-04-2 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[1-(2-(3-butylnylmethylamino)ethyl]-1H-indol-3-yl)-4-(1-naphthalenyl)- (9CI) (CA INDEX NAME)



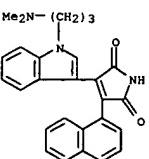
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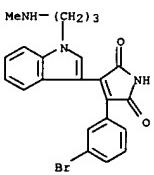
RN 634605-33-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[1-(2-{(2-hydroxyethyl)methylamino}ethyl]-1H-indol-3-yl)-4-(2-methoxyphenyl)- (9CI) (CA INDEX NAME)



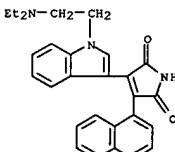
RN 634605-34-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[1-(3-(dimethylamino)propyl]-1H-indol-3-yl)-4-(1-naphthalenyl)- (9CI) (CA INDEX NAME)



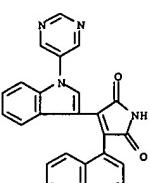
RN 634605-35-9 CAPLUS



RN 634605-36-0 CAPLUS  
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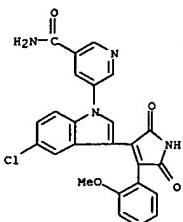
RN 634605-41-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1-naphthalenyl)-4-[1-(5-pyrimidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

L6 ANSWER 29 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 634605-47-3 CAPLUS  
 CN 3-Pyridinecarboxamide,  
 5-[5-chloro-3-[2,5-dihydro-4-(2-methoxyphenyl)-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

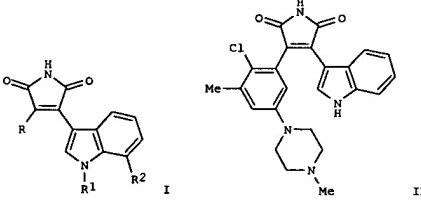
L6 ANSWER 30 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

ACCESSION NUMBER: 2003:796695 CAPLUS  
 DOCUMENT NUMBER: 139:307678  
 TITLE: Preparation of indolylmaleimides for treating diseases  
 INVENTOR(S): Juergen; Zenke, Gerhard  
 PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.  
 SOURCE: PCT Int. Appl., 33 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003082859	A1	20031009	WO 2003-EP3470	20030402
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GL, GB, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LT, LU, LV, MA, MD, MK, MN, MX, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SE, SG, SK, TJ, TM, TN, TR, TT, UA, US, UZ, VC, VN, YU, ZA, ZW RW: AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
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AU 2003224031	A1	20031013	AU 2003-224031	20030402
EP 1490355	A1	20041229	EP 2003-720413	20030402
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BR 2003008979	A	20050104	BR 2003-8979	20030402
US 2005119274	A1	20050602	US 2003-510027	20030402
JP 2005527563	T2	20050915	JP 2003-580325	20030402
NO 2004004613	A	20041026	NO 2004-4613	20041026
PRIORITY APPLN. INFO.:			GB 2002-7729	A 20020403
			GB 2003-3323	A 20030213
			WO 2003-EP3470	W 20030402

OTHER SOURCE(S): MARPAT 139:307678  
 GI

L6 ANSWER 30 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



AB The title compds. [I; R1 = H, Me, Et, iso-Pr; R2 = H, halo, alkoxy, alkyl;  
 R = substituted Ph, 1-naphthyl, 4-pyrimidinyl, 4-quinolinyl, 1-isooquinolinyl] which are useful in the treatment and/or prevention of diseases or disorders mediated by T lymphocytes and/or PKC, e.g. acute or chronic rejection of organ or tissue allo- or xenografts, graft vs. host diseases, atherosclerosis, vascular occlusion due to vascular injury such as angioplasty, restenosis, obesity, syndrome X, impaired glucose tolerance, polycystic ovary syndrome, hypertension, heart failure, chronic obstructive pulmonary disease, CNS diseases such as Alzheimer disease or amyotrophic lateral sclerosis, cancer; infectious diseases such as AIDS, septic shock or adult respiratory distress syndrome, ischemia/reperfusion injury e.g. myocardial infarction, stroke, gut ischemia, renal failure or hemorrhage shock, or traumatic shock, e.g. traumatic brain injury, were prepared. The compds. I are also useful in the treatment and/or prevention of T-cell mediated acute or chronic inflammatory diseases or disorders or autoimmune diseases e.g. rheumatoid arthritis, osteoarthritis, systemic lupus erythematosus, Hashimoto's thyroiditis, multiple sclerosis, myasthenia gravis, diabetes type I or II and the disorders associated therewith, e.g. angiopathy, diabetic proliferative retinopathy, diabetic macular edema, nephropathy, neuropathy and dawn phenomenon, respiratory diseases such as asthma or inflammatory lung injury, inflammatory liver injury, inflammatory glomerular injury, cutaneous manifestations of immunol.-mediated disorders or illnesses, inflammatory and hyperproliferative skin diseases (such as psoriasis, atopic dermatitis, allergic contact dermatitis, irritant contact dermatitis and further eczematous dermatoses, seborrheic dermatitis), inflammatory eye diseases, e.g., Sjogren's syndrome, keratoconjunctivitis or uveitis, inflammatory bowel disease, Crohn's disease or ulcerative colitis. Thus, reacting 2-[2-chloro-3-methyl-5-(4-methylpiperazinyl)phenyl]acetamide (preparation given) with 3-indoleglyoxylate in the presence of tert-BuOK in THF afforded II. The compds. I showed IC50 of < 1 μM against different isoforms of PKC. Pharmaceutical composition comprising the compound I is claimed.

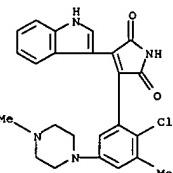
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L6 ANSWER 30 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 611234-24-3P 611234-25-4P 611234-26-5P  
 611234-27-6P 611234-28-7P 611234-29-8P  
 611234-30-1P 611234-31-2P 611234-32-3P  
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 611234-36-7P 611234-37-8P 611234-38-9P  
 611234-40-3P  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of indolylmaleimides for treating diseases or disorders mediated by T lymphocytes and/or PKC)

RN 611234-11-8 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-3-methyl-5-(4-methyl-1-piperazinyl)phenyl]-4-(1H-indol-3-yl)-, monoacetate (9CI) (CA INDEX NAME)

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CRN 611234-10-7  
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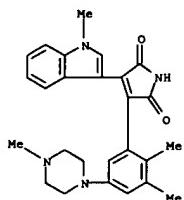


CM 2

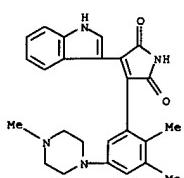
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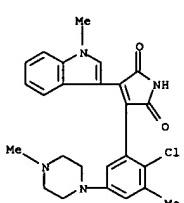
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 CN 1H-Pyrrole-2,5-dione, 3-[2,3-dimethyl-5-(4-methyl-1-piperazinyl)phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 611234-13-0 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(2,3-dimethyl-5-(4-methyl-1-piperazinyl)phenyl)-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)

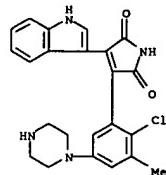


RN 611234-14-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-3-methyl-5-(4-methyl-1-piperazinyl)phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

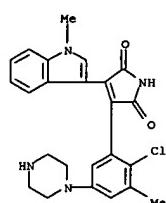


RN 611234-15-2 CAPLUS

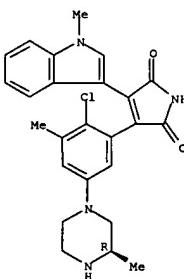
1H-Pyrrole-2,5-dione,  
3-(2-chloro-3-methyl-5-(1-piperazinyl)phenyl)-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 611234-16-3 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-3-methyl-5-(1-piperazinyl)phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

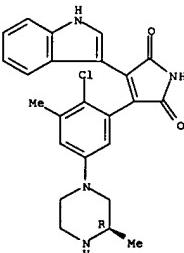


RN 611234-17-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(2-chloro-3-methyl-5-((3R)-3-methyl-1-piperazinyl)phenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)  
Absolute stereochemistry.

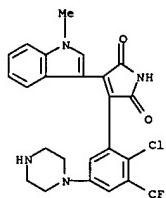


RN 611234-19-6 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-3-methyl-5-((3R)-3-methyl-1-piperazinyl)phenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)

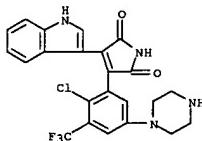
Absolute stereochemistry.



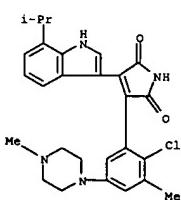
RN 611234-20-9 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-5-(1-piperazinyl)-3-(trifluoromethyl)phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



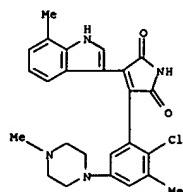
RN 611234-21-0 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-5-(1-piperazinyl)-3-(trifluoromethyl)phenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 611234-22-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-3-methyl-5-(4-methyl-1-piperazinyl)phenyl]-4-(7-(1-methylethyl)-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



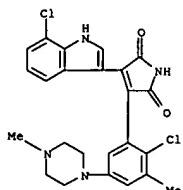
RN 611234-23-2 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-3-methyl-5-(4-methyl-1-piperazinyl)phenyl]-4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



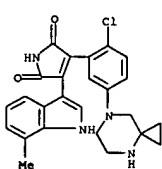
RN 611234-24-3 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-3-methyl-5-(4-methyl-1-piperazinyl)phenyl]-4-(7-ethyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



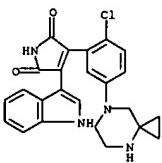
RN 611234-25-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(7-chloro-1H-indol-3-yl)-4-[2-chloro-3-methyl-5-(4-methyl-1-piperazinyl)phenyl]- (9CI) (CA INDEX NAME)



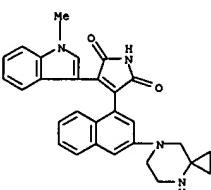
L6 ANSWER 30 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
CN 1H-Pyrrole-2,5-dione,  
3-[2-chloro-5-(4,7-diazaspiro[2.5]oct-7-yl)phenyl]-4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 611234-30-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[2-chloro-5-(4,7-diazaspiro[2.5]oct-7-yl)phenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)

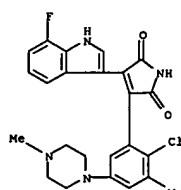


RN 611234-31-2 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[3-(4,7-diazaspiro[2.5]oct-7-yl)-1-naphthalenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

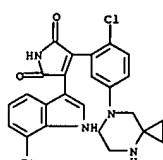


RN 611234-32-3 CAPLUS

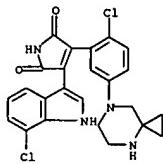
L6 ANSWER 30 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
RN 611234-26-5 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-3-methyl-5-(4-methyl-1-piperazinyl)phenyl]-4-(7-fluoro-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 611234-27-6 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[2-chloro-5-(4,7-diazaspiro[2.5]oct-7-yl)phenyl]-4-(7-ethyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 611234-28-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[2-chloro-5-(4,7-diazaspiro[2.5]oct-7-yl)phenyl]-4-(7-chloro-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

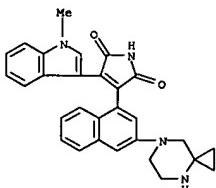


RN 611234-29-8 CAPLUS

L6 ANSWER 30 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
CN 1H-Pyrrole-2,5-dione,  
3-[3-(4,7-diazaspiro[2.5]oct-7-yl)-1-naphthalenyl]-4-(1-methyl-1H-indol-3-yl)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 611234-31-2  
CMF C29 H26 N4 O2



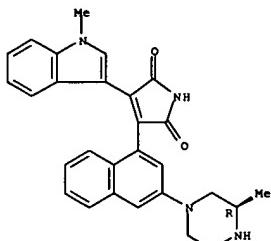
CM 2

CRN 76-05-1  
CMF C2 H F3 O2

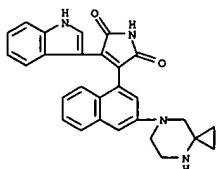


RN 611234-33-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[3-[(3R)-3-methyl-1-piperazinyl]-1-naphthalenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

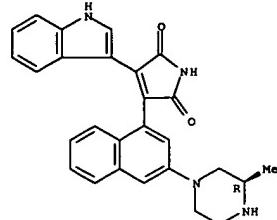


RN 611234-34-5 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[3-(4,7-diazaspiro[2.5]oct-7-yl)-1-naphthalenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



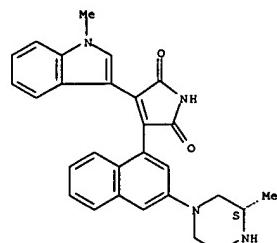
RN 611234-35-6 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(1H-indol-3-yl)-4-(3-[(3R)-3-methyl-1-piperazinyl]-1-naphthalenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



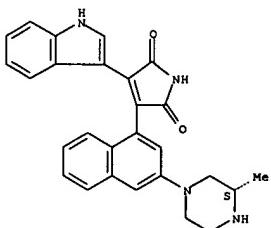
RN 611234-36-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[1-methyl-1H-indol-3-yl]-4-[3-[(3S)-3-methyl-1-piperazinyl]-1-naphthalenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



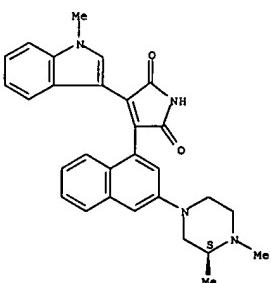
RN 611234-37-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(1H-indol-3-yl)-4-[3-[(3S)-3-methyl-1-piperazinyl]-1-naphthalenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



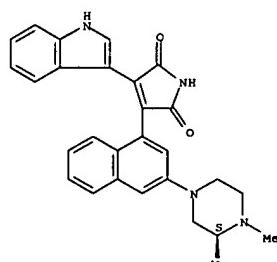
RN 611234-38-9 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[3-[(3S)-3,4-dimethyl-1-piperazinyl]-1-naphthalenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 611234-40-3 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[3-[(3S)-3,4-dimethyl-1-piperazinyl]-1-naphthalenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

ACCESSION NUMBER: 2003:795114 CAPLUS

DOCUMENT NUMBER: 140:42054

TITLE: Aryl[a]pyrrolo[3,4-c]carbazoles as selective cyclin D1-CDK4 inhibitors

AUTHOR(S): Sanchez-Martinez, Concha; Shih, Chuan; Paul, Margaret M.; Zhu, Guoxin; Paal, Michael; Somozas, Carmen; Li, Tiechao; Kunrich, Christine F.; Wimmeroski, Leonard L.; Kun, Zhou; Brooks, Harold B.; Patel, Bharvin K.; R.A. Schultz, Richard M.; DeHahn, Tammy B.; Spencer, Charles D.; Watkins, Scott A.; Considine, Eileen; Dempsey, Jack A.; Ogg, Catherine A.; Campbell, Robert M.; Anderson, Bryan A.; Wagner, Jill

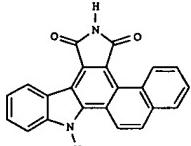
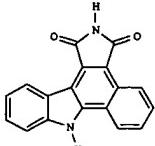
CORPORATE SOURCE: DORNER, Lilly Spain S.A., Madrid, 28108, Spain  
SOURCE: Bioorganic & Medicinal Chemistry Letters (2003), 13(21), 3835-3839CODEN: BMCLB; ISSN: 0960-894X  
PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 140:42054

GI



AB The synthesis of analogs of Arcyriaflavin A, in which one indole ring is replaced by an aryl or heteroaryl ring, is described. These series of aryl[a]pyrrolo[3,4-c]carbazoles, e.g., I, were evaluated as inhibitors of Cyclin D1-CDK4. A potent and selective D1-CDK4 inhibitor, II (D1-CDK4 IC<sub>50</sub> = 45 nM), has been identified. The potency, selectivity profile against other kinases, and structure-activity relationship (SAR) trends

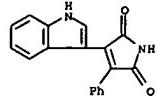
of this class of compds. are discussed.  
IT 125313-57-7P 221233-51-8P 610312-74-8P  
635300-91-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of maleimides via heterocyclization of indolylglyoxylate

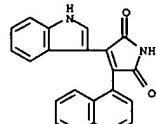
with arylacetamides followed by elimination in the preparation of arenopyrrolocarbazoles as cyclin D1-CDK4 inhibitors)

RN 125313-57-7 CAPLUS

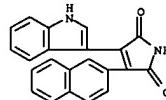
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-phenyl- (9CI) (CA INDEX NAME)



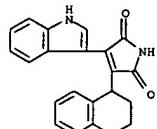
RN 221233-51-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-(1-naphthalenyl)- (9CI) (CA INDEX NAME)



RN 610312-74-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-(2-naphthalenyl)- (9CI) (CA INDEX NAME)



RN 635300-91-3 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-(1,2,3,4-tetrahydro-1-naphthalenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS

ACCESSION NUMBER: 2003:743245 CAPLUS

DOCUMENT NUMBER: 139:307698

TITLE: Synthesis of Aryl- and Heteroaryl[a]pyrrolo[3,4-c]carbazoles

AUTHOR(S): Sanchez-Martinez, Concha; Paul, Margaret M.; Shih, Chuan; Sullivan, Kevin A.; Grutsch, John L.; Cooper, Jeremy T.; Kolis, Stanley P.

COPORATE SOURCE: Lilly S.A., Alcobendas, 28108, Spain  
SOURCE: Journal of Organic Chemistry (2003), 68(21), 8008-8014

CODEN: JOCEAH; ISSN: 0022-3263

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 139:307698

AB Synthesis of aryl- and hetero[a]pyrrolo[3,4-c]carbazoles by photochem. oxidation and Heck cyclization are described. Photochem. oxidation of 2-naphthyl indolyl maleimide affords two different carbazole

regioisomers, depending on the reaction conditions. The regiochem. of the cyclization can be controlled using the Heck reaction.

IT 125313-57-7P 221233-51-8P 610312-74-8P

610312-78-2P 610312-79-3P 610312-80-6P

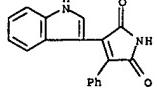
610312-81-7P 610312-82-8P 610312-83-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of aryl- and hetero[a]pyrrolo[3,4-c]carbazoles by photochem.

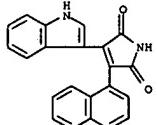
oxidation and Heck cyclization)

RN 125313-57-7 CAPLUS

CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-phenyl- (9CI) (CA INDEX NAME)

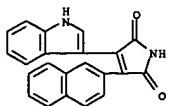


RN 221233-51-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-(1-naphthalenyl)- (9CI) (CA INDEX NAME)

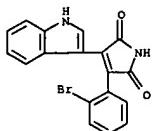


RN 610312-74-8 CAPLUS

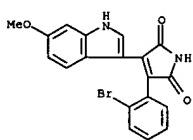
L6 ANSWER 32 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-(2-naphthalenyl)- (9CI) (CA INDEX NAME)



RN 610312-78-2 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(2-bromophenyl)-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)

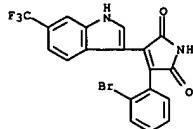


RN 610312-79-3 CAPLUS  
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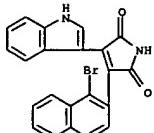


RN 610312-80-6 CAPLUS  
 CN 1H-Pyrrole-2,5-dione,  
 3-(2-bromophenyl)-4-(6-(trifluoromethyl)-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

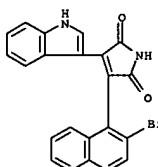
L6 ANSWER 32 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 610312-81-7 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(1-bromo-2-naphthalenyl)-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)

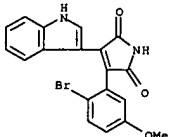


RN 610312-82-8 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(2-bromo-1-naphthalenyl)-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 610312-83-9 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(2-bromo-5-methoxyphenyl)-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)

L6 ANSWER 32 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

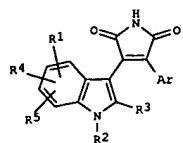


REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 33 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2003:737721 CAPLUS  
 DOCUMENT NUMBER: 139:276815  
 TITLE: Preparation of 3-(indol-3-yl) 4-heteroaryl pyrrole-2,5-diones as GSK-3β inhibitors  
 INVENTOR(S): Albaugh, Pamela Ann; Ammann, Jochen; Burkholder, Timothy Paul; Clayton, Joshua Ryan; Conner, Scott Eugene; Cunningham, Brian Eugene; Engler, Thomas Albert; Furness, Kelly Wayne; Henry, James Robert; Li, Yihong; Malhotra, Sushant; Tebbe, Mark Joseph; Zhu, Guoxin  
 PATENT ASSIGNEE(S): Eli Lilly and Company, USA; et al.  
 SOURCE: PCT Int. Appl., 88 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003076398	A2	20030918	WO 2003-US5052	20030305
WO 2003076398	A3	20040226		
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OTHER SOURCE(S): MARPAT 139:276815  
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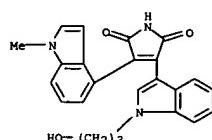


**AB** The title compds. [I; Ar = (un)substituted benzofuryl, indolyl, quinolinyl, etc.; R1 = H, alkoxy, halo, etc.; R2 = H, alkyl, (un)substituted piperidin-4(or 3)-yl, etc.; R3 = H, halo, alkyl, cyclopoly; or R2 and R3 taken together = CH<sub>2</sub>CH<sub>2</sub>CH(CH<sub>2</sub>OH)CH<sub>2</sub>; R4, R5 = H, halo, useful for treating GSK-3 $\beta$  mediated diseases such as diabetes and Alzheimer's disease. Were prepared Thus, reacting 2-[1-(3-hydroxypropyl)-1H-indol-3-yl]acetamide with Me (1-methyl-1H-indol-4-yl)oxoacetate in the presence of tert-BuOK in DMF afforded 54% I [Ar = 1-methyl-1H-indol-4-yl; R1, R3-R5 = H; R2 = 3-hydroxypropyl] which showed IC<sub>50</sub> of 0.1757  $\mu$ M against GSK-3 $\beta$ . Pharmaceutical composition comprising the compound I was claimed.

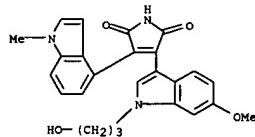
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**RL:** PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses); (prepn. of 3-(indol-3-yl) 4-heteroaryl substituted pyrrole-2,5-diones as GSK-3 $\beta$  inhibitors)

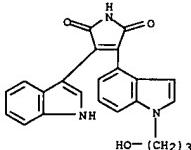
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**CN** 1H-Pyrrole-2,5-dione,  
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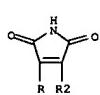
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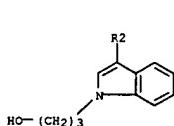
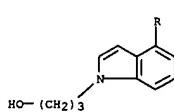
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**CN** 1H-Pyrrole-2,5-dione,  
 3-[1-(3-hydroxypropyl)-1H-indol-4-yl]-4-(1H-indol-3-



**RN** 604007-27-4 CAPLUS  
**CN** 1H-Pyrrole-2,5-dione, 3-[1-(3-hydroxypropyl)-1H-indol-3-yl]-4-[1-(3-hydroxypropyl)-1H-indol-4-yl]- (9CI) (CA INDEX NAME)



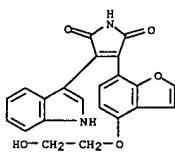
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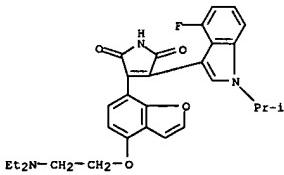
PAGE 2-A

**RN** 604007-31-0 CAPLUS  
**CN** 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-(5-[2-(1,1-dimethylethoxy)ethoxy]-1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

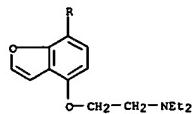
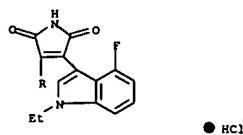
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**CN** 1H-Pyrrole-2,5-dione,  
 3-(4-(2-hydroxyethoxy)-7-benzofuranyl)-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



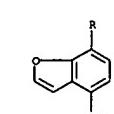
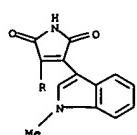
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**CN** 1H-Pyrrole-2,5-dione, 3-[4-(2-diethylamino)ethoxy]-7-benzofuranyl-4-(1-fluoro-1-(methylsulfonyl)-1H-indol-3-yl)- monohydrochloride (9CI) (CA INDEX NAME)



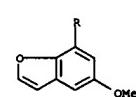
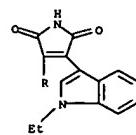
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**CN** 1H-Pyrrole-2,5-dione, 3-[4-(2-diethylamino)ethoxy]-7-benzofuranyl-4-(1-ethyl-4-fluoro-1H-indol-3-yl)- monohydrochloride (9CI) (CA INDEX NAME)



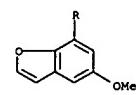
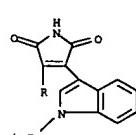
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3-(4-methoxy-7-benzofuranyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



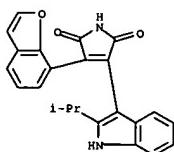
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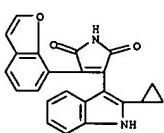
RN 604007-37-6 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(5-methoxy-7-benzofuranyl)-4-[1-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



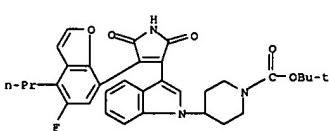
RN 604007-38-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[2-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



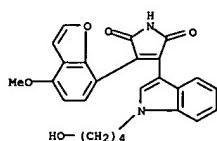
RN 604007-39-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-(2-cyclopropyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



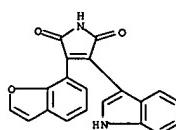
RN 604007-42-3 CAPLUS  
CN 1-Piperidinecarboxylic acid, 4-[3-[4-(5-fluoro-4-propyl-7-benzofuranyl)-2,5-dihydro-2,5-dioxo-1H-pyrrrol-3-yl]-1H-indol-1-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



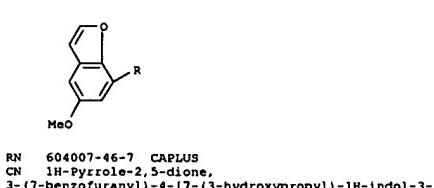
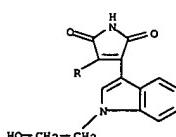
RN 604007-43-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
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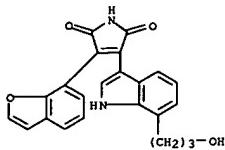


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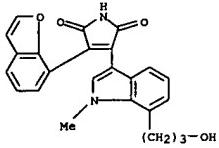


RN 604007-45-6 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[1-(2-hydroxyethyl)-1H-indol-3-yl]-4-(5-methoxy-7-benzofuranyl)- (9CI) (CA INDEX NAME)

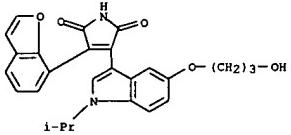




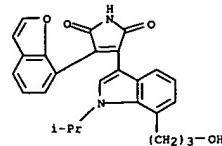
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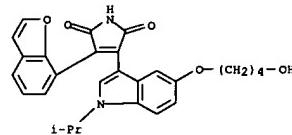
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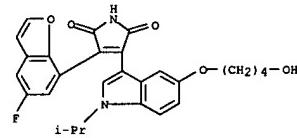
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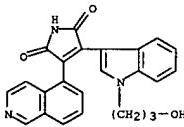
RN 604007-50-3 CAPLUS  
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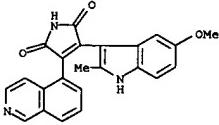
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CN 1H-Pyrrole-2,5-dione, 3-(5-fluoro-7-benzofuranyl)-4-[5-(4-hydroxybutoxy)-1-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



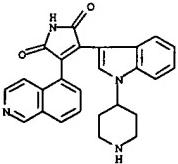
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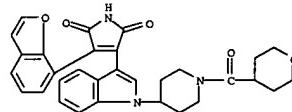
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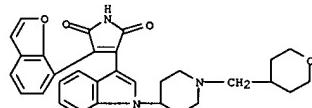
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RN 604007-56-9 CAPLUS  
CN Piperidine, 4-[3-(4-(7-benzofuranyl)-2,5-dihydro-2,5-dioxo-1H-pyrrol-3-yl)-1H-indol-1-yl]-1-[(tetrahydro-2H-pyran-4-yl)carbonyl]- (9CI) (CA INDEX NAME)

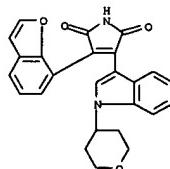


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CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[1-1-(tetrahydro-2H-pyran-4-yl)methyl-4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)

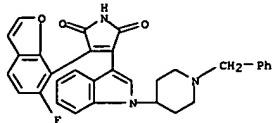


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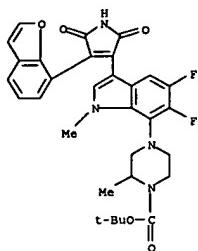
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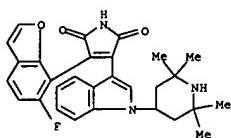
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RN 604007-61-6 CAPLUS  
CN 1H-Piperazinecarboxylic acid, 4-[3-(4-(7-benzofuranyl)-2,5-dihydro-2,5-dioxo-1H-pyrrol-3-yl)-5,6-difluoro-1-methyl-1H-indol-7-yl]-2-methyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

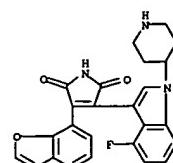


RN 604007-62-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[1-(2,2,6,6-tetramethyl-4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



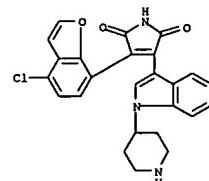
● HCl

RN 604007-64-9 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(7-benzofuranyl)-4-[4-fluoro-1-(4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)

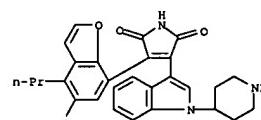


● HCl

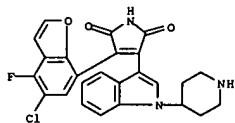
RN 604007-65-0 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(4-chloro-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



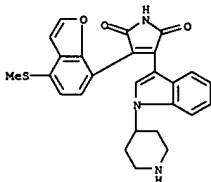
RN 604007-66-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(5-fluoro-4-propyl-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



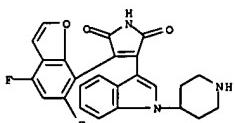
RN 604007-67-2 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(5-chloro-4-fluoro-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



RN 604007-68-3 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[4-(methylthio)-7-benzofuranyl]-4-[1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

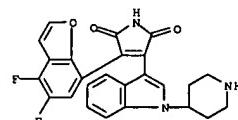


RN 604007-69-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(4,6-difluoro-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



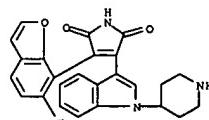
RN 604007-70-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(5,6-difluoro-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)

RN 604007-71-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(4,5-difluoro-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

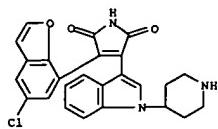
RN 604007-72-9 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(6-fluoro-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

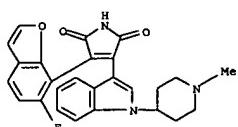
RN 604007-73-0 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(5-chloro-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-

L6 ANSWER 33 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
indol-3-yl)-, monohydrochloride (9CI) (CA INDEX NAME)



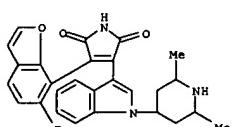
● HCl

RN 604007-74-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-(1-(1-methyl-4-piperidinyl)-1H-indol-3-yl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

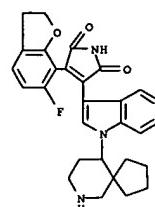
RN 604007-75-2 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[1-(2,6-dimethyl-4-piperidinyl)-1H-indol-3-yl]-4-(6-fluoro-7-benzofuranyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 604007-76-3 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[1-(7-azaspiro[4.5]dec-10-yl)-1H-indol-3-yl]-4-(6-

L6 ANSWER 33 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
fluoro-2,3-dihydro-7-benzofuranyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

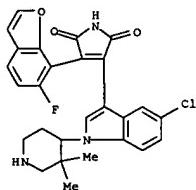
RN 604007-77-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[1-(7-azaspiro[4.5]dec-10-yl)-1H-indol-3-yl]-4-(6-fluoro-7-benzofuranyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

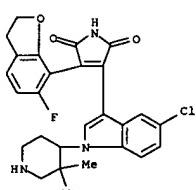
RN 604007-81-0 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[5-chloro-1-(3,3-dimethyl-4-piperidinyl)-1H-indol-3-yl]-4-(6-fluoro-7-benzofuranyl)-, monohydrochloride (9CI) (CA INDEX NAME)

L6 ANSWER 33 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

RN 604007-82-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[5-chloro-1-(3,3-dimethyl-4-piperidinyl)-1H-indol-3-yl]-4-(6-fluoro-2,3-dihydro-7-benzofuranyl)-, monohydrochloride (9CI) (CA INDEX NAME)

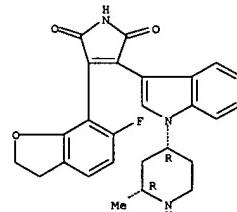


● HCl

RN 604007-83-2 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-2,3-dihydro-7-benzofuranyl)-4-[1-[(2R,4R)-2-methyl-4-piperidinyl]-1H-indol-3-yl]-, monohydrochloride, rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

L6 ANSWER 33 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



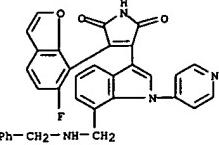
● HCl

RN 604007-84-3 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(6-fluoro-7-benzofuranyl)-4-[1-(3-hydroxymethyl)-4-piperidinyl]-1H-indol-3-yl)-, monohydrochloride (9CI) (CA INDEX NAME)

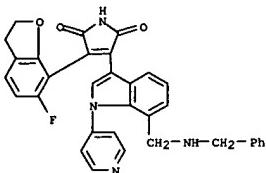


● HCl

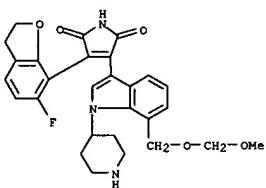
RN 604007-85-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[1-[(phenylmethyl)amino]methyl]-1-(4-pyridinyl)-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



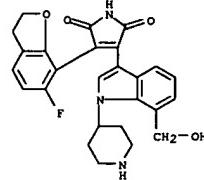
RN 604007-86-5 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-2,3-dihydro-7-benzofuranyl)-4-[(1-(phenylmethylamino)methyl)-1-(4-pyridinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



RN 604007-87-6 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-2,3-dihydro-7-benzofuranyl)-4-[(7-(methoxymethoxy)methyl)-1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

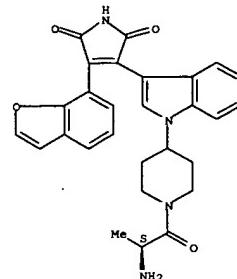


RN 604007-88-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-2,3-dihydro-7-benzofuranyl)-4-[(7-(hydroxymethyl)-1-(4-piperidinyl)-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

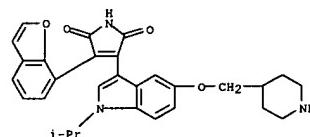


RN 604007-90-1 CAPLUS  
CN Piperidine, 1-[(2S)-2-amino-1-oxopropyl]-4-[3-[4-(7-benzofuranyl)-2,5-dihydro-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl]- (9CI) (CA INDEX NAME)

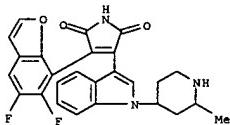
Absolute stereochemistry.



RN 604007-91-2 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[(1-(1-methylethyl)-5-(4-piperidinylmethoxy)-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

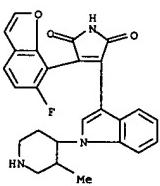


L6 ANSWER 33 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
RN 604007-92-3 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(5,6-difluoro-7-benzofuranyl)-4-[(1-(2-methyl-4-piperidinyl)-1H-indol-3-yl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

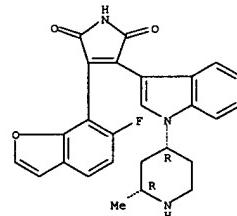
RN 604007-93-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[(1-(3-methyl-4-piperidinyl)-1H-indol-3-yl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 604007-94-5 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[(1-((2R,4R)-2-methyl-4-piperidinyl)-1H-indol-3-yl)-, monohydrochloride, rel- (9CI) (CA INDEX NAME)

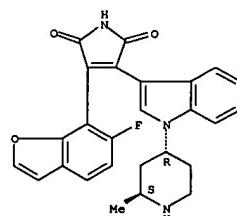
Relative stereochemistry.



● HCl

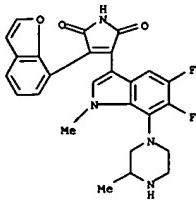
RN 604007-95-6 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[(1-((2R,4S)-2-methyl-4-piperidinyl)-1H-indol-3-yl)-, monohydrochloride, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



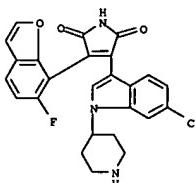
● HCl

RN 604007-97-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[5,6-difluoro-1-methyl-7-(3-methyl-1-piperazinyl)-1H-indol-3-yl)-, monohydrochloride (9CI) (CA INDEX NAME)



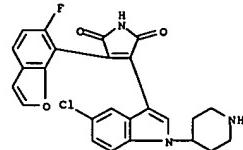
● HCl

RN 604007-98-9 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-[6-chloro-1-(4-piperidinyl)-1H-indol-3-yl]-4-(6-fluoro-7-benzofuranyl)-, monohydrochloride (9CI) (CA INDEX NAME)



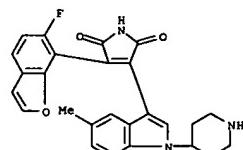
● HCl

RN 604007-99-0 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-1-(4-piperidinyl)-1H-indol-3-yl]-4-(6-fluoro-7-benzofuranyl)-, monohydrochloride (9CI) (CA INDEX NAME)



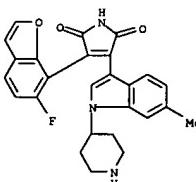
● HCl

RN 604008-00-6 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[5-methyl-1-(4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



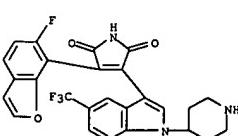
● HCl

RN 604008-01-7 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[6-methyl-1-(4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

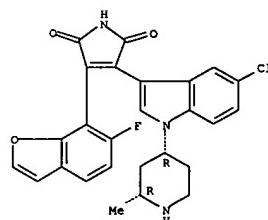
RN 604008-02-8 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[1-(4-piperidinyl)-5-(trifluoromethyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 604008-03-9 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-1-((2R,4S)-2-methyl-4-piperidinyl)-1H-indol-3-yl]-4-(6-fluoro-7-benzofuranyl)-, monohydrochloride, rel- (9CI) (CA INDEX NAME)

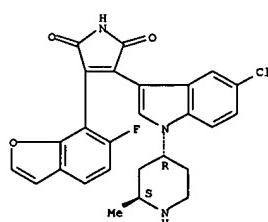
Relative stereochemistry.



● HCl

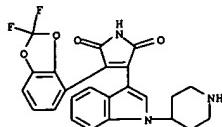
RN 604008-04-0 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-1-((2R,4S)-2-methyl-4-piperidinyl)-1H-indol-3-yl]-4-(6-fluoro-7-benzofuranyl)-, monohydrochloride, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



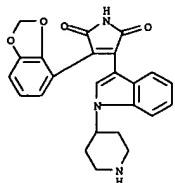
● HCl

RN 604008-06-2 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(2,2-difluoro-1,3-benzodioxol-4-yl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



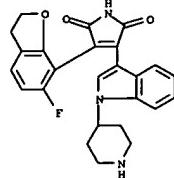
● HCl

RN 604008-07-3 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1,3-benzodioxol-4-yl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



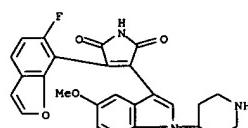
● HCl

RN 604008-08-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-2,3-dihydro-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



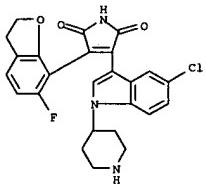
● HCl

RN 604008-09-5 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[5-methoxy-1-(4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



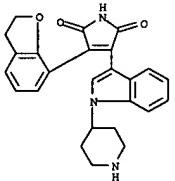
● HCl

RN 604008-10-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-1-(4-piperidinyl)-1H-indol-3-yl]-4-(6-fluoro-2,3-dihydro-7-benzofuranyl)-, monohydrochloride (9CI) (CA INDEX NAME)



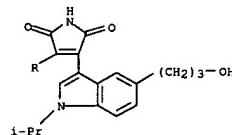
● HCl

RN 604008-11-9 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(2,3-dihydro-7-benzofuranyl)-4-[1-(4-piperidinyl)-  
1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)

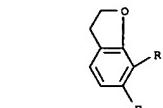


● HCl

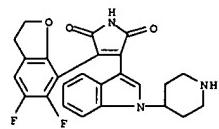
RN 604008-12-0 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-2,3-dihydro-7-benzofuranyl)-4-[5-(3-hydroxypropyl)-1-(1-methylethyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

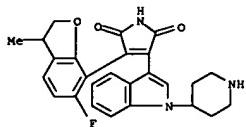


RN 604008-13-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(5-difluoro-2,3-dihydro-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



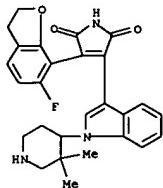
● HCl

RN 604008-14-2 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-2,3-dihydro-3-methyl-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



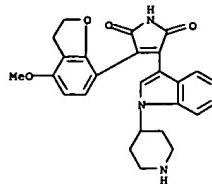
● HCl

RN 604008-15-3 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[1-(3,3-dimethyl-4-piperidinyl)-1H-indol-3-yl]-4-(6-fluoro-2,3-dihydro-7-benzofuranyl)-, monohydrochloride (9CI) (CA INDEX NAME)



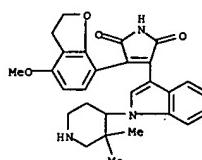
● HCl

RN 604008-16-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(2,3-dihydro-4-methoxy-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



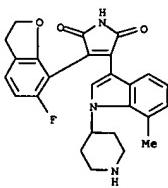
● HCl

RN 604008-17-5 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(2,3-dihydro-4-methoxy-7-benzofuranyl)-4-[1-(3,3-dimethyl-4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



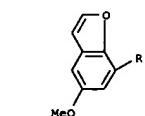
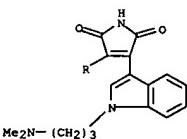
● HCl

RN 604008-19-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-2,3-dihydro-7-benzofuranyl)-4-[7-methyl-1-(4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)

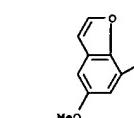
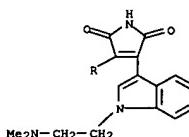


● HCl

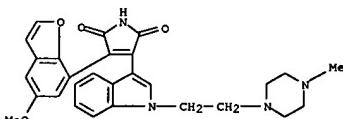
RN 604008-20-0 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[1-(3-(dimethylamino)propyl)-1H-indol-3-yl]-4-(5-methoxy-7-benzofuranyl)- (9CI) (CA INDEX NAME)



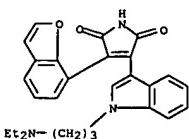
RN 604008-21-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[1-(2-(dimethylamino)ethyl)-1H-indol-3-yl]-4-(5-methoxy-7-benzofuranyl)- (9CI) (CA INDEX NAME)



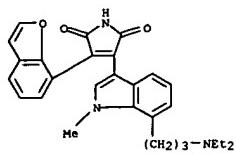
RN 604008-22-2 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(5-methoxy-7-benzofuranyl)-4-[1-(2-(4-methyl-1-piperazinyl)ethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



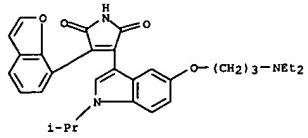
RN 604008-23-3 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[1-[3-(diethylamino)propyl]-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



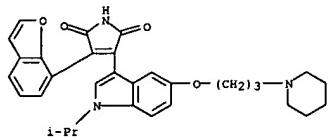
RN 604008-24-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[7-(3-(diethylamino)propyl)-1-methyl-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



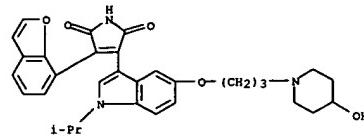
RN 604008-25-5 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[5-(3-(diethylamino)propoxy)-1-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



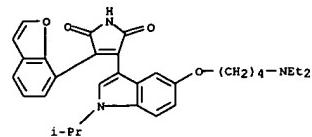
RN 604008-26-6 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[1-(1-methylethyl)-5-(3-(1-piperidinyl)propoxy)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



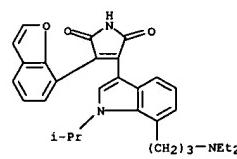
RN 604008-27-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[5-(3-(4-hydroxy-1-piperidinyl)propoxy)-1-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



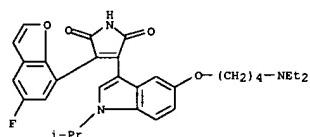
RN 604008-28-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[5-(4-(diethylamino)butoxy)-1-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



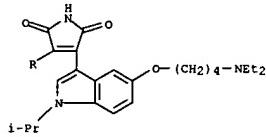
RN 604008-29-9 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[7-(3-(diethylamino)propyl)-1-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



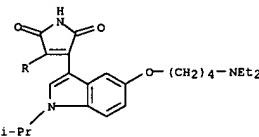
RN 604008-30-2 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[5-(4-(diethylamino)butoxy)-1-(1-methylethyl)-1H-indol-3-yl]-4-(5-fluoro-7-benzofuranyl)- (9CI) (CA INDEX NAME)



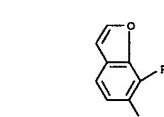
RN 604008-31-3 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[5-(4-(diethylamino)butoxy)-1-(1-methylethyl)-1H-indol-3-yl]-4-(5,6-difluoro-7-benzofuranyl)-, monohydrochloride (9CI) (CA INDEX NAME)



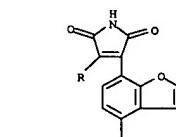
● HCl



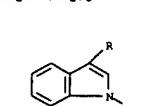
● HCl



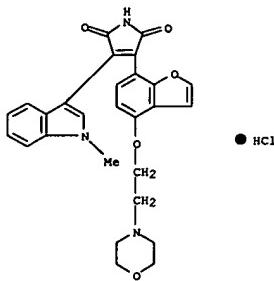
RN 604008-34-6 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[4-(3-(dimethylamino)propoxy)-7-benzofuranyl]-4-(1-methyl-1H-indol-3-yl)-, monohydrochloride (9CI) (CA INDEX NAME)



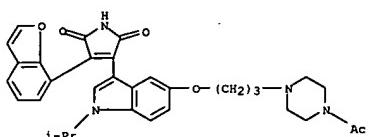
● HCl



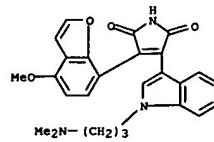
RN 604008-35-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-(4-(2-(4-morpholinyl)ethoxy)-7-benzofuranyl)-, monohydrochloride (9CI) (CA INDEX NAME)



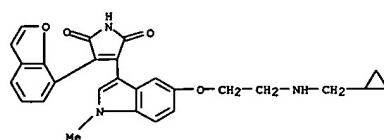
RN 604008-38-0 CAPLUS  
CN Piperazine, 1-acetyl-4-[3-[3-(4-(7-benzofuranyl)-2,5-dihydro-2,5-dioxo-1H-pyrrol-3-yl)-1-(1-methylethyl)-1H-indol-5-yl]oxy]propyl-, monohydrochloride (9CI) (CA INDEX NAME)



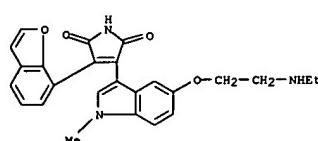
RN 604008-39-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[1-[3-(dimethylamino)propyl]-1H-indol-3-yl]-4-(4-methoxy-7-benzofuranyl)- (9CI) (CA INDEX NAME)



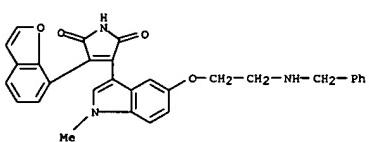
RN 604008-40-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[5-[2-[(cyclopropylmethyl)amino]ethoxy]-1-methyl-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



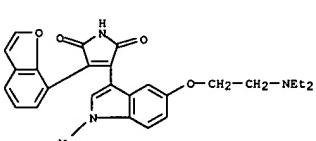
RN 604008-41-5 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[5-[2-(ethylamino)ethoxy]-1-methyl-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



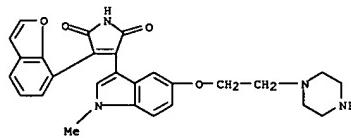
RN 604008-42-6 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[1-methyl-5-[2-[(phenylmethyl)amino]ethoxy]-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



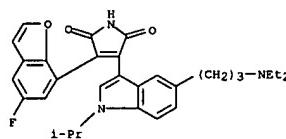
RN 604008-43-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[5-[2-(diethylamino)ethoxy]-1-methyl-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



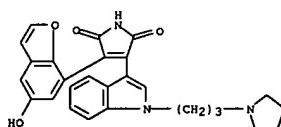
RN 604008-44-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[1-methyl-5-[2-(1-piperazinyl)ethoxy]-1H-indol-3-yl]-, dihydrochloride (9CI) (CA INDEX NAME)



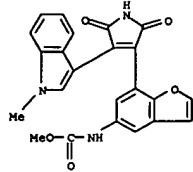
RN 604008-45-9 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[5-[3-(diethylamino)propyl]-1-(1-methylethyl)-1H-indol-3-yl]-4-(5-fluoro-7-benzofuranyl)- (9CI) (CA INDEX NAME)



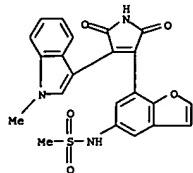
RN 604008-46-0 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(5-hydroxy-7-benzofuranyl)-4-[1-[3-(1-pyrrolidinyl)propyl]-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



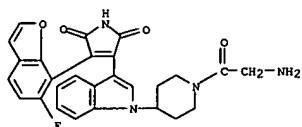
RN 604008-47-1 CAPLUS  
CN Carbamic acid, [7-[2,5-dihydro-4-(1-methyl-1H-indol-3-yl)-2,5-dioxo-1H-pyrrrol-3-yl]-5-benzofuranyl]-, methyl ester (9CI) (CA INDEX NAME)



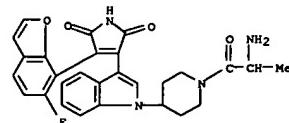
RN 604008-48-2 CAPLUS  
CN Methanesulfonamide,  
N-(7-[2,5-dihydro-4-(1-methyl-1H-indol-3-yl)-2,5-dioxo-1H-pyrrrol-3-yl]-5-benzofuranyl)- (9CI) (CA INDEX NAME)



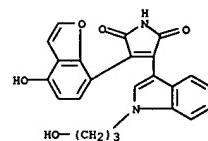
RN 604008-49-3 CAPLUS  
CN Piperidine,  
1-(aminocetyl)-4-[3-[4-(6-fluoro-7-benzofuranyl)-2,5-dihydro-2,5-dioxo-1H-pyrrrol-3-yl]-1H-indol-1-yl]- (9CI) (CA INDEX NAME)



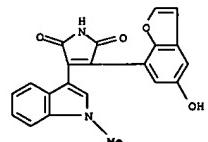
RN 604008-50-6 CAPLUS  
CN Piperidine,  
1-(2-amino-1-oxopropyl)-4-[3-[4-(6-fluoro-7-benzofuranyl)-2,5-dihydro-2,5-dioxo-1H-pyrrrol-3-yl]-1H-indol-1-yl]- (9CI) (CA INDEX NAME)



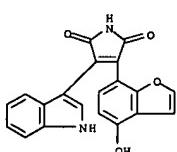
RN 604008-52-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(4-hydroxy-7-benzofuranyl)-4-[1-(3-hydroxypropyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



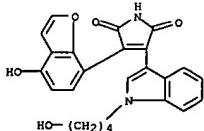
RN 604008-53-9 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(5-hydroxy-7-benzofuranyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



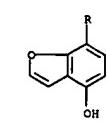
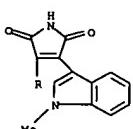
RN 604008-54-0 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(4-hydroxy-7-benzofuranyl)-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



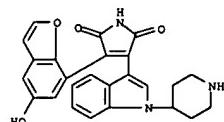
RN 604008-55-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(4-hydroxy-7-benzofuranyl)-4-(1-(4-hydroxybutyl)-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



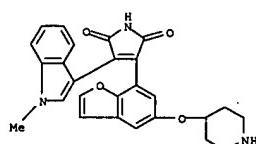
RN 604008-56-2 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(4-hydroxy-7-benzofuranyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 604008-57-3 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(5-hydroxy-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

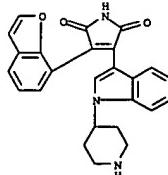


RN 604008-58-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(1-methyl-1H-indol-3-yl)-4-(5-(4-piperidinyl)-7-benzofuranyl)-, monohydrochloride (9CI) (CA INDEX NAME)



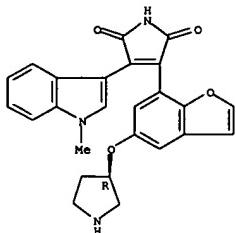
● HCl

RN 604008-60-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



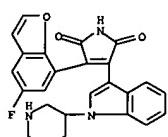
RN 604008-61-9 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[5-((3R)-3-pyrrolidinyl)-7-benzofuranyl]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



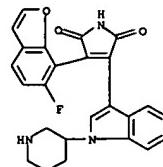
● HCl

RN 604008-62-0 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(5-fluoro-7-benzofuranyl)-4-[1-(3-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



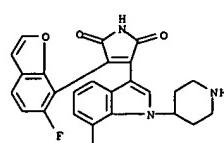
● HCl

RN 604008-63-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(6-fluoro-7-benzofuranyl)-4-[1-(3-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



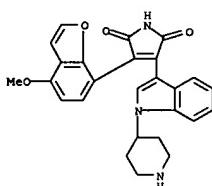
● HCl

RN 604008-64-2 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-(7-methyl-1-(4-piperidinyl)-1H-indol-3-yl)-, monohydrochloride (9CI) (CA INDEX NAME)

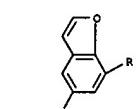
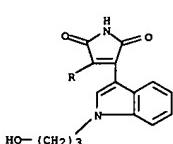


● HCl

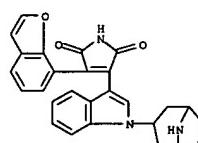
RN 604008-65-3 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(4-methoxy-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



RN 604008-66-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(5-hydroxy-7-benzofuranyl)-4-[1-(3-hydroxypropyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

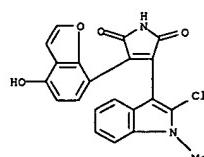


RN 604008-67-5 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[1-(3-endo)-8-azabicyclo{3.2.1}oct-3-yl-1H-indol-3-yl]-4-(7-benzofuranyl)-, monohydrochloride (9CI) (CA INDEX NAME)

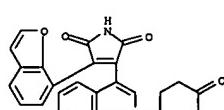


● HCl

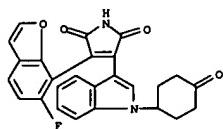
RN 604008-68-6 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(2-chloro-1-methyl-1H-indol-3-yl)-4-(4-hydroxy-7-benzofuranyl)- (9CI) (CA INDEX NAME)



RN 604008-69-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(7-benzofuranyl)-4-[1-(4-oxocyclohexyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

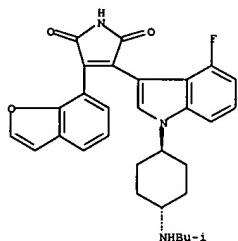


RN 604008-70-0 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[1-(4-oxocyclohexyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



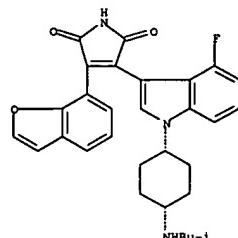
RN 604008-71-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[4-fluoro-1-(trans-4-((2-methylpropyl)amino)cyclohexyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)

Relative stereochemistry.



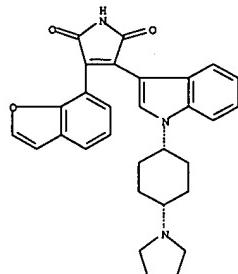
RN 604008-72-2 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[4-fluoro-1-(cis-4-((2-methylpropyl)amino)cyclohexyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)

Relative stereochemistry.



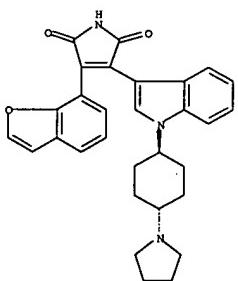
RN 604008-73-3 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[1-(cis-4-(1-pyrrolidinyl)cyclohexyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

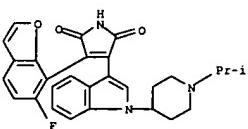


RN 604008-74-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[1-(trans-4-(1-pyrrolidinyl)cyclohexyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

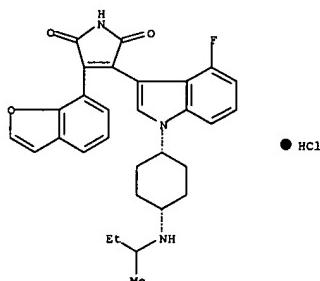


RN 604008-75-5 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[1-(1-(1-methylethyl)-4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



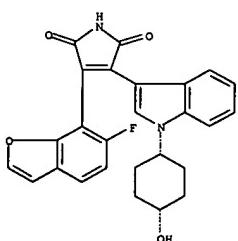
RN 604008-76-6 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[4-fluoro-1-(1-methylpropyl)cyclohexyl]-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)

Relative stereochemistry.

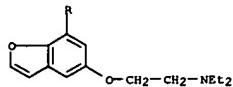
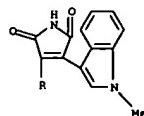


RN 604008-77-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[1-(cis-4-hydroxycyclohexyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

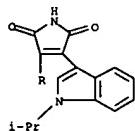
Relative stereochemistry.



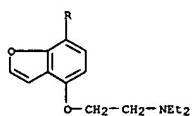
RN 604008-78-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[5-(2-(diethylamino)ethoxy)-7-benzofuranyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



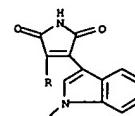
RN 604008-79-9 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[4-(2-(diethylamino)ethoxy)-7-benzofuranyl]-4-[1-(1-methylethyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



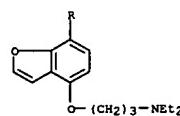
● HCl



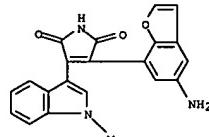
RN 604008-80-2 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[4-(3-(diethylamino)propoxy)-7-benzofuranyl]-4-[1-(1-methylethyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



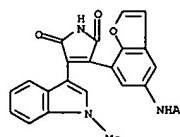
● HCl



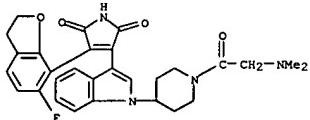
RN 604008-81-3 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(5-amino-7-benzofuranyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



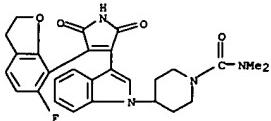
RN 604008-82-4 CAPLUS  
CN Acetamide, N-[7-(2,5-dihydro-4-(1-methyl-1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl)-5-benzofuranyl]- (9CI) (CA INDEX NAME)



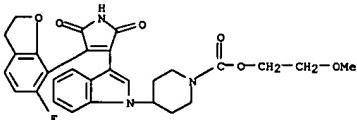
RN 604008-85-7 CAPLUS  
CN Piperidine, 1-((dimethylamino)acetyl)-4-(3-[4-(6-fluoro-2,3-dihydro-7-benzofuranyl)-2,5-dihydro-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl)- (9CI)



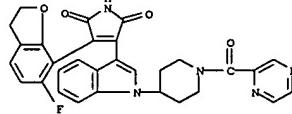
RN 604008-86-8 CAPLUS  
CN 1-Piperidinecarboxamide,  
4-[3-[4-(6-fluoro-2,3-dihydro-7-benzofuranyl)-2,5-dihydro-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl]-N,N-dimethyl- (9CI) (CA INDEX NAME)



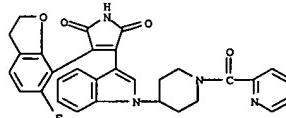
RN 604008-88-0 CAPLUS  
CN 1-Piperidinecarboxylic acid,  
4-[3-[4-(6-fluoro-2,3-dihydro-7-benzofuranyl)-2,5-dihydro-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl]-, 2-methoxyethyl ester (9CI) (CA INDEX NAME)



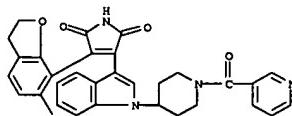
RN 604008-91-5 CAPLUS  
CN Piperidine,  
4-[3-[4-(6-fluoro-2,3-dihydro-7-benzofuranyl)-2,5-dihydro-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl]-1-(pyrazinylcarbonyl)- (9CI) (CA INDEX NAME)



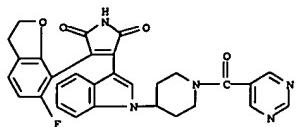
RN 604008-92-6 CAPLUS  
CN Piperidine,  
4-[3-[4-(6-fluoro-2,3-dihydro-7-benzofuranyl)-2,5-dihydro-1H-pyrrol-3-yl]-1H-indol-1-yl]-1-(2-pyridinylcarbonyl)- (9CI) (CA INDEX NAME)



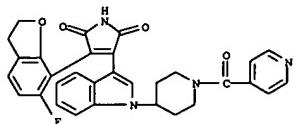
RN 604008-93-7 CAPLUS  
CN Piperidine,  
4-[3-[4-(6-fluoro-2,3-dihydro-7-benzofuranyl)-2,5-dihydro-1H-pyrrol-3-yl]-1H-indol-1-yl]-1-(3-pyridinylcarbonyl)- (9CI) (CA INDEX NAME)



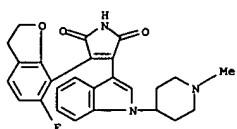
RN 604008-94-8 CAPLUS  
CN Piperidine,  
4-[3-[4-(6-fluoro-2,3-dihydro-7-benzofuranyl)-2,5-dihydro-1H-pyrrol-3-yl]-1H-indol-1-yl]-1-(5-pyrimidinylcarbonyl)- (9CI) (CA INDEX NAME)



RN 604008-95-9 CAPLUS  
CN Piperidine,  
4-[3-[4-(6-fluoro-2,3-dihydro-7-benzofuranyl)-2,5-dihydro-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl]-1-(4-pyridinylcarbonyl) (9CI) (CA INDEX NAME)

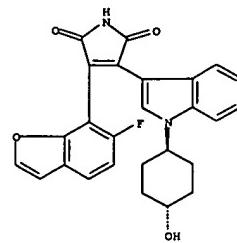


RN 604008-96-0 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-2,3-dihydro-7-benzofuranyl)-4-[1-(1-methyl-4-piperidinyl)-1H-indol-3-yl] (9CI) (CA INDEX NAME)

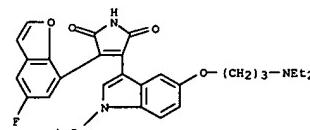


RN 604010-42-6 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[1-(trans-4-hydroxycyclohexyl)-1H-indol-3-yl] (9CI) (CA INDEX NAME)

Relative stereochemistry.



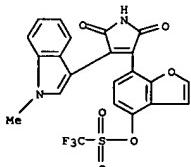
RN 604010-61-9 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[5-(3-(diethylamino)propoxy]-1-(1-methylethyl)-1H-indol-3-yl)-4-(5-fluoro-7-benzofuranyl)-, monohydrochloride (9CI) (CA INDEX NAME)



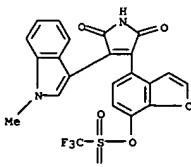
● HCl

IT 604010-19-7 604010-20-0 604010-21-1  
604010-22-2 604010-26-6 604010-27-7  
604010-28-8 604010-29-9 604010-30-2  
604010-31-3 604010-32-4 604010-33-5  
604010-34-6 604010-63-1  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(preparation of 3-(indol-3-yl) 4-heteroaryl substituted  
pyrrole-2,5-diones  
as GSK-3 $\beta$  inhibitors)

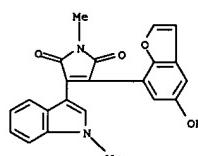
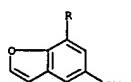
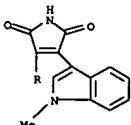
RN 604010-19-7 CAPLUS  
CN Methanesulfonic acid, trifluoro-, 7-(2,5-dihydro-4-(1-methyl-1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl)-4-benzofuranyl ester (9CI) (CA INDEX NAME)



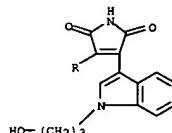
RN 604010-20-0 CAPLUS  
CN Methanesulfonic acid, trifluoro-, 4-[2,5-dihydro-4-(1-methyl-1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl]-7-benzofuranyl ester (9CI) (CA INDEX NAME)



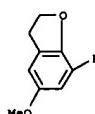
RN 604010-21-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(5-methoxy-7-benzofuranyl)-4-(1-methyl-1H-indol-3-yl) (9CI) (CA INDEX NAME)

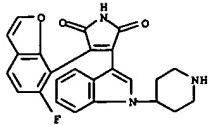


RN 604010-26-6 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(2,3-dihydro-5-methoxy-7-benzofuranyl)-4-[1-(3-hydroxypropyl)-1H-indol-3-yl] (9CI) (CA INDEX NAME)

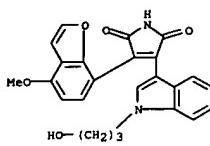


RN 604010-27-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(6-fluoro-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl] (9CI) (CA INDEX NAME)

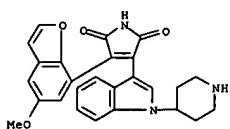




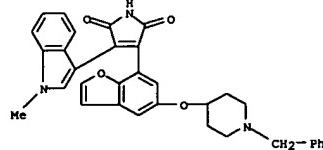
RN 604010-28-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[1-(3-hydroxypropyl)-1H-indol-3-yl]-4-(4-methoxy-7-  
benzofuranyl)- (9CI) (CA INDEX NAME)



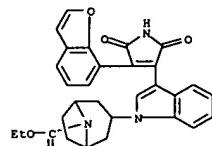
RN 604010-29-9 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(5-methoxy-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-  
indol-3-yl]- (9CI) (CA INDEX NAME)



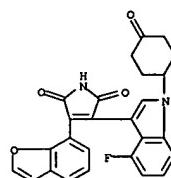
RN 604010-30-2 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[1-methyl-1H-indol-3-yl]-4-[5-[1-(phenylmethyl)-4-  
piperidinyl]oxy]-7-benzofuranyl)- (9CI) (CA INDEX NAME)



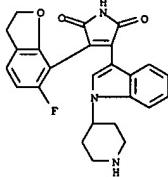
RN 604010-31-3 CAPLUS  
CN 8-Azabicyclo[3.2.1]octane-8-carboxylic acid,  
3-[4-(7-benzofuranyl)-2,5-  
dihydro-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl]-, ethyl ester, (3-endo)-  
(9CI) (CA INDEX NAME)



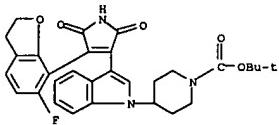
RN 604010-32-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[4-fluoro-1-(4-oxocyclohexyl)-  
1H-indol-3-yl]- (9CI) (CA INDEX NAME)



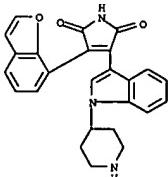
RN 604010-33-5 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-2,3-dihydro-7-benzofuranyl)-4-[1-(4-  
piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



RN 604010-34-6 CAPLUS  
CN 1-Piperidinecarboxylic acid,  
4-[3-(4-(6-fluoro-2,3-dihydro-7-benzofuranyl)-  
2,5-dihydro-2,5-dioxo-1H-pyrrol-3-yl)-1H-indol-1-yl]-, 1,1-dimethylethyl  
ester (9CI) (CA INDEX NAME)

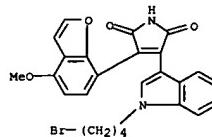


RN 604010-63-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-(1-(4-piperidinyl)-1H-indol-3-  
yl)-, monohydrochloride (9CI) (CA INDEX NAME)

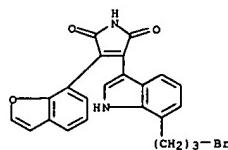


604009-49-6P 604009-50-9P 604009-60-5P  
604009-81-6P 604009-82-7P 604009-83-8P  
604009-84-9P 604009-85-0P 604009-86-1P  
604009-87-2P 604009-88-3P 604009-89-4P  
604009-90-7P 604009-91-8P 604009-92-9P  
604009-93-0P 604009-94-1P 604009-95-2P  
604009-96-3P 604009-97-4P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(prepn. of 3-(indol-3-yl) 4-heteroaryl substituted pyrrole-2,5-diones  
as GSK-3β inhibitors)

RN 604009-39-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[1-(4-bromobutyl)-1H-indol-3-yl]-4-(4-methoxy-7-  
benzofuranyl)- (9CI) (CA INDEX NAME)



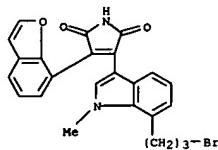
RN 604009-41-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[7-(3-bromopropyl)-1H-indol-3-  
yl]- (9CI) (CA INDEX NAME)



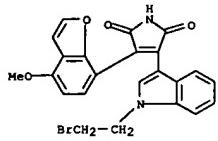
RN 604009-42-9 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(7-benzofuranyl)-4-[7-(3-bromopropyl)-1-methyl-1H-  
indol-3-yl]- (9CI) (CA INDEX NAME)

● HCl

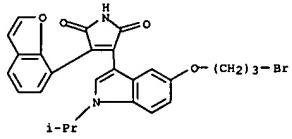
IT 604009-39-4P 604009-41-8P 604009-42-9P  
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604009-46-3P 604009-47-4P 604009-48-5P



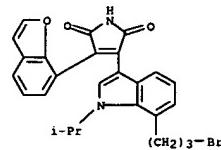
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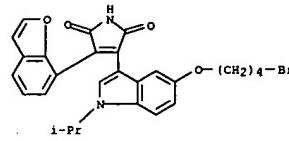
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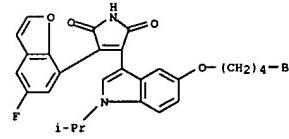
RN 604009-45-2 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[7-(3-bromopropyl)-1-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



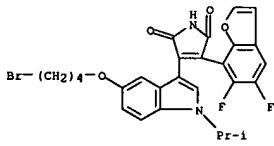
RN 604009-46-3 CAPLUS  
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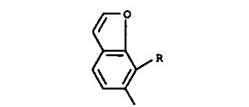
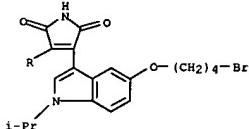
RN 604009-47-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[5-(4-bromobutoxy)-1-(1-methylethyl)-1H-indol-3-yl]-4-(5,6-difluoro-7-benzofuranyl)- (9CI) (CA INDEX NAME)



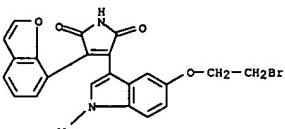
RN 604009-48-5 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[5-(4-bromobutoxy)-1-(1-methylethyl)-1H-indol-3-yl]-4-(5,6-difluoro-7-benzofuranyl)- (9CI) (CA INDEX NAME)



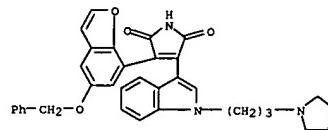
RN 604009-49-6 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[5-(4-bromobutoxy)-1-(1-methylethyl)-1H-indol-3-yl]-4-(6-fluoro-7-benzofuranyl)- (9CI) (CA INDEX NAME)



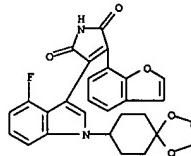
RN 604009-50-9 CAPLUS  
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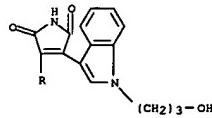
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CN 1H-Pyrrole-2,5-dione, 3-(5-(phenylmethoxy)-7-benzofuranyl)-4-[1-(3-(1-



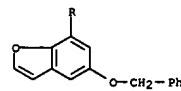
RN 604009-81-6 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[1-(1,4-dioxaspiro[4.5]dec-8-yl)-4-(5,6-difluoro-7-benzofuranyl)- (9CI) (CA INDEX NAME)



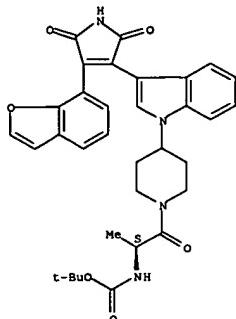
RN 604009-82-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[1-(3-hydroxypropyl)-1H-indol-3-yl]-4-[5-(phenylmethoxy)-7-benzofuranyl]- (9CI) (CA INDEX NAME)



RN 604009-83-8 CAPLUS  
CN Carbamic acid, (1-(2-[4-(3-(4-(7-benzofuranyl)-2,5-dihydro-2,5-dioxo-1H-pyrrrol-3-yl)-1H-indol-1-yl]-1-methyl-2-oxoethyl)-,

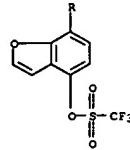


Absolute stereochemistry.



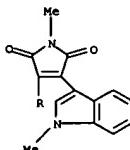
RN 604009-84-9 CAPLUS  
 CN Methanesulfonic acid, trifluoro-, 7-[2,5-dihydro-1-methyl-4-(1-methyl-1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl]-4-benzofuranyl ester (9CI) (CA INDEX NAME)

PAGE 2-A

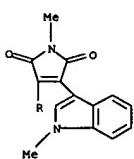


RN 604009-85-0 CAPLUS  
 CN Methanesulfonic acid, trifluoro-, 4-[2,5-dihydro-1-methyl-4-(1-methyl-1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl]-7-benzofuranyl ester (9CI) (CA INDEX NAME)

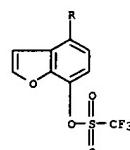
PAGE 1-A



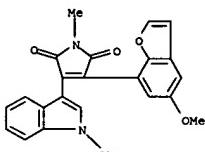
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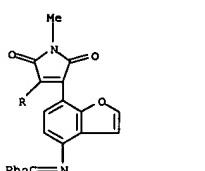
PAGE 2-A



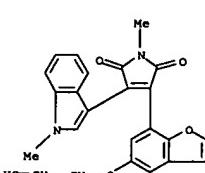
RN 604009-86-1 CAPLUS  
 CN 1H-Pyrrole-2,5-dione,  
 3-(5-methoxy-7-benzofuranyl)-1-methyl-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



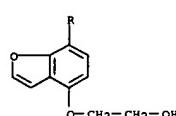
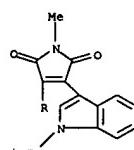
RN 604009-87-2 CAPLUS  
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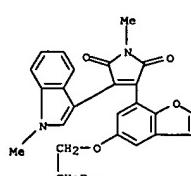
RN 604009-88-3 CAPLUS  
 CN 1H-Pyrrole-2,5-dione,  
 3-[5-(2-hydroxyethoxy)-7-benzofuranyl]-1-methyl-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



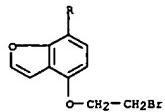
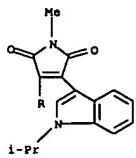
RN 604009-89-4 CAPLUS  
 CN 1H-Pyrrole-2,5-dione,  
 3-[4-(2-hydroxyethoxy)-7-benzofuranyl]-1-methyl-4-(1-methylethyl)-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



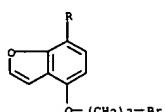
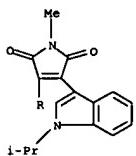
RN 604009-90-7 CAPLUS  
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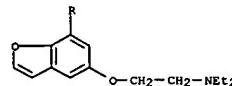
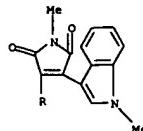
RN 604009-91-8 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-[4-(2-bromoethoxy)-7-benzofuranyl]-1-methyl-4-(1-methylethyl)-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



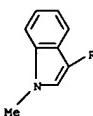
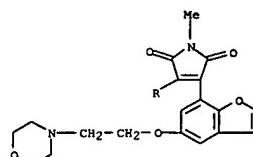
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 3-[4-(3-bromopropoxy)-7-benzofuranyl]-1-methyl-4-[1-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



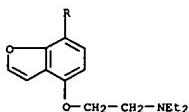
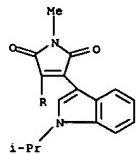
RN 604009-93-0 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-[5-[2-(diethylamino)ethoxy]-7-benzofuranyl]-1-methyl-4-[1-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



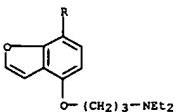
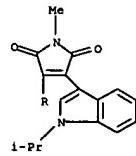
RN 604009-94-1 CAPLUS  
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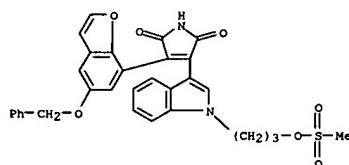
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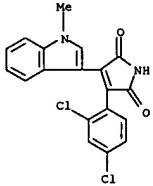
RN 604009-96-3 CAPLUS  
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RN 604009-97-4 CAPLUS  
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 3-[1-{3-[(methylsulfonyloxy)propyl]-1H-indol-3-yl}-4-[5-(phenylmethoxy)-7-benzofuranyl]- (9CI) (CA INDEX NAME)



L6 ANSWER 34 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2003:710424 CAPLUS  
 DOCUMENT NUMBER: 140:157240  
 TITLE: Glycogen synthase kinase-3 inhibitors protect central neurons against excitotoxicity  
 AUTHOR(S): Facci, Laura; Stevens, David A.; Skaper, Stephen D.  
 CORPORATE SOURCE: Neurophysiology and Cell Sciences, Neurology and GI Centre of Excellence for Drug Discovery, GlaxoSmithKline Research and Development Ltd., Essex, CM9 5AW, UK  
 SOURCE: NeuroReport (2003), 14(11), 1467-1470  
 PUBLISHER: Lippincott Williams & Wilkins  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Protein kinase B (PKB, or Akt), a downstream effector of phosphatidylinositol 3-kinase (PI-3-K) can play a critical role in regulating neuronal survival. Among known targets of PKB, glycogen synthase kinase-3 (GSK-3) is inhibited by PKB-mediated phosphorylation. Recent studies implicate GSK-3 as a physiol. relevant principal regulatory target of the PI-3-K/PKB survival pathway. SB-216763 and SB-415286, selective small mol. inhibitors of GSK-3, protected cultured rat cerebellar granule neurons and hippocampal neurons against excitotoxicity mediated by NMDA and non-NMDA receptor agonists. Treatment with SB-216763 and SB-415286 was optimal when initiated 6-7 days before excitotoxin exposure. As GSK-3 can modulate transcriptional events, these results may provide insight into the identification of new neuroprotective targets.  
 IT 280744-09-4, SB-216763  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (glycogen synthase kinase-3 inhibitors protect cerebellar and hippocampal neurons against excitotoxicity)  
 RN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)-(9CI) CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)-(9CI) (CA INDEX NAME)

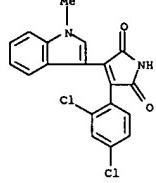


REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 35 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2003:644688 CAPLUS  
 DOCUMENT NUMBER: 139:335566  
 TITLE: Inhibition of glycogen synthase kinase 3B in sensory neurons in culture alters filopodia dynamics and microtubule distribution in growth cones  
 AUTHOR(S): Owen, Rebecca; Gordon-Weeks, Philip R.  
 CORPORATE SOURCE: The MRC Centre for Developmental Neurobiology, King's College London, London, SE1 1UL, UK  
 SOURCE: Molecular and Cellular Neuroscience (2003), 23(4), 626-637  
 PUBLISHER: Elsevier Science  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB MAP1B is a major microtubule-associated phospho-protein in growing axons and growth cones. Recent findings suggest that glycogen synthase kinase 3B (GSK-3B) phosphorylation of MAP1B may act as a mol. switch to regulate microtubule stability during axonogenesis. The effects of lithium, an inhibitor of GSK-3B, on neurons in culture, are consistent with this suggestion. However, lithium is not a specific inhibitor of GSK-3B. In the expts. reported here we have compared the effects of lithium with SB-216763, a new, potent and specific inhibitor of GSK-3 that has a different mechanism of action from lithium. We examined the effects of inhibition of GSK-3B on axonogenesis, microtubule distribution, and growth cone behavior in cultured embryonic chick primary sensory neurons. Both compds. reduced axon elongation rates and increased growth cone size. In addition, both compds. slowed growth cone filopodia dynamics. These behavioral changes correlated with a decrease in MAP1B phosphorylation and an increase in the number of stable microtubules in growth cones. These results suggest that a major role of MAP1B in growing axons and growth cones is to regulate microtubule and actin filament stability. Furthermore, this function is regulated by phosphorylation of MAP1B by GSK-3B.  
 IT 280744-09-4, SB-216763  
 RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (GSK-3B inhibitor; inhibition of glycogen synthase kinase 3B in cultured embryonic chick sensory neurons alters filopodia dynamics and microtubule distribution in growth cones)  
 RN 280744-09-4 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)-(9CI) (CA INDEX NAME)

L6 ANSWER 35 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



L6 ANSWER 36 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2003:551367 CAPLUS  
 DOCUMENT NUMBER: 139:106486

TITLE: Use of a GSK-3B inhibitor in the manufacture of a medicament for increasing bone formation  
 INVENTOR(S): Day-Lollini, Patricia Ann; Gong, Leyi  
 PATENT ASSIGNEE(S): F. Hoffmann-La Roche A.-G., Switz.  
 SOURCE: PCT Int. Appl., 40 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003057202	A1	20030717	WO 2003-EP49	20030107
WO 2003057202	C1	20031211		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YA, ZA, ZM, ZW				
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CA 2471565	AA	20030717	CA 2003-2471565	20030107
AU 2003235798	A1	20030724	AU 2003-235798	20030107
EP 1465610	A1	20040103	EP 2003-729222	20030107
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2005519056	T2	20050630	JP 2003-557560	20030107
US 2003176484	A1	20030918	US 2003-339193	20030109
PRIORITY APPLN. INFO.:			US 2002-348055P	P 20020110
			WO 2003-EP49	W 20030107

OTHER SOURCE(S): MARPAT 139:106486

AB This invention relates to the use of inhibitors of glycogen synthase kinase-3B (GSK-3B) to promote bone formation and treat bone metabolic diseases, such as osteoporosis. For example,

3-(1-methyl-5-chlorindol-3-yl)-4-[3-[2,3-dihydroxypropylamino]phenyl]-1H-pyrrole-2,5-dione was synthesized. GSK-3B inhibitors were formulated in various dosage forms, e.g., tablets, capsules, oral suspensions, and suppositories.

IT 396090-78-1P 396090-83-8P 396090-96-3P

396090-98-5P 396091-05-7P 396091-12-6P

396091-16-0P 396091-63-7P 396091-71-7P

425636-61-9P 561066-07-7P 561066-08-0P

561066-09-9P 561066-10-2P

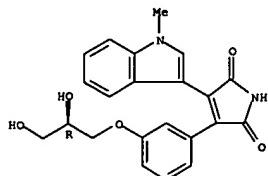
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation and oral compns. of glycogen synthase kinase-3B inhibitors for increasing bone formation)

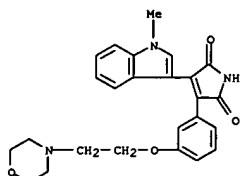
RN 396090-78-1 CAPLUS

CN 1H-Pyrrole-2,5-dione, 3-[3-[2(R)-2,3-dihydroxypropoxy]phenyl]-4-(1-methyl-

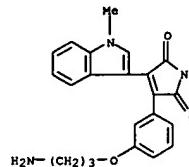
Absolute stereochemistry.



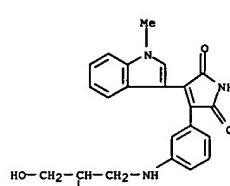
RN 396090-83-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-(3-[2-(4-morpholinyl)ethoxy]phenyl)- (9CI) (CA INDEX NAME)



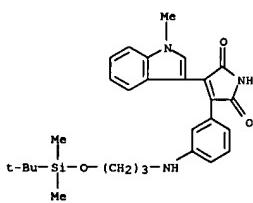
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CN 1H-Pyrrole-2,5-dione,  
3-[3-(3-aminopropoxy)phenyl]-4-(1-methyl-1H-indol-3-yl)-, monohydrochloride (9CI) (CA INDEX NAME)



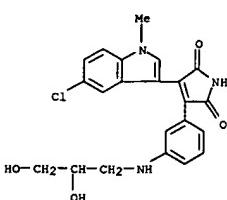
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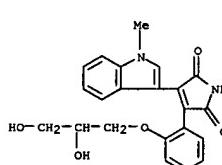
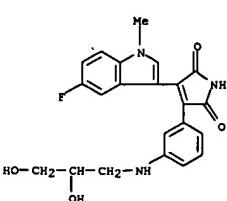
RN 396091-05-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[3-[(3-[(1,1-dimethylethyl)dimethylsilyloxy]propyl)amino]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



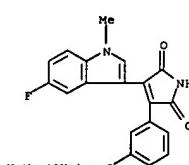
RN 396091-12-6 CAPLUS  
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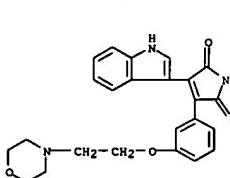
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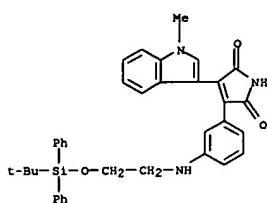
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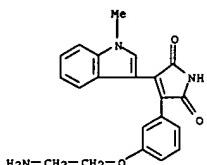
RN 425636-61-9 CAPLUS  
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L6 ANSWER 36 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
RN S61066-07-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[3-[(2-[(1,1-dimethylethyl)diphenylsilyl]oxy)ethyl]-  
1-amino)phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 561066-08-8 CAPLUS  
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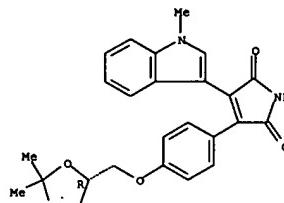


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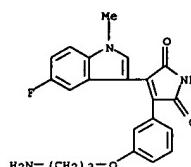
RN 561066-09-9 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[4-[(4R)-2,2-dimethyl-1,3-dioxolan-4-yl]methoxy]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L6 ANSWER 36 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

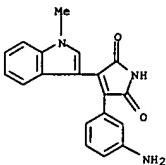


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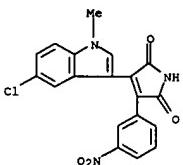


IT 125314-13-8P 396091-14-8P 396091-15-9P  
396091-19-3P 396091-20-6P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and oral compns. of glycogen synthase kinase-3B  
inhibitors  
for increasing bone formation)  
RN 125314-13-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(3-aminophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

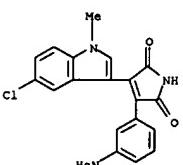
L6 ANSWER 36 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 396091-14-8 CAPLUS  
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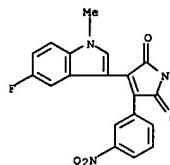


RN 396091-15-9 CAPLUS  
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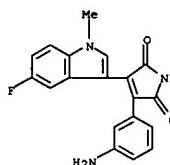


RN 396091-19-3 CAPLUS  
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L6 ANSWER 36 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 396091-20-6 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(3-aminophenyl)-4-(5-fluoro-1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS  
FORMAT RECORD. ALL CITATIONS AVAILABLE IN THE RE

ACCESSION NUMBER: 2003:485970 CAPLUS

DOCUMENT NUMBER: 139-254721

TITLE: Novel, potent and selective cyclin D1/CDK4

inhibitors:

AUTHOR(S): indolo[6,7-*a*]pyrrolo[3,4-*c*]carbazoles  
 Engler, Thomas A.; Furness, Kelly; Malhotra, Sushant;  
 Sanchez-Martinez, Concha; Shih, Chuani Xie, Walter;  
 Zhu, Guoxin; Zhou, Xun; Conner, Scott; Paul, Margaret  
 M.; Sullivan, Kevin A.; Kolis, Stanley P.; Brooks,  
 Harold B.; Patel, Bhavin; Schultz, Richard M.;  
 DeHahn, Tammy B.; Kirmani, Kashif; Spencer, Charles  
 D.; Watkins, Scott A.; Considine, Eileen L.; Dempsey,  
 Jack A.; Ogg, Catherine A.; Stamm, Nancy B.

Anderson, Bryan D.; Campbell, Robert M.; Vasudevan, Vasu;

Lytle,

CORPORATE SOURCE: Michelle L.  
 Lilly Research Laboratories, Eli Lilly and Company,  
 Indianapolis, IN, 46285, USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (2003),  
 13(14), 2261-2267

CODEN: BMCLB8; ISSN: 0960-894X

Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 139-254721

AB The synthesis and CDK inhibitory properties of a series of indolo[6,7-*a*]pyrrolo[3,4-*c*]carbazoles is reported. In addition to their potent CDK activity, the compounds display antiproliferative activity against two human cancer cell lines. These inhibitors also effect strong G1 arrest in these cell lines and inhibit Rb phosphorylation at Ser780 consistent with inhibition of cyclin D1/CDK4.

IT 408354-39-2P 408354-44-9P 408354-52-9P

408354-57-4P 408354-59-6P 408354-61-0P

408354-63-2P 408354-64-3P 408354-68-7P

408354-72-3P 408354-75-6P 408354-77-8P

408354-78-0P 408354-81-4P 408354-84-7P

408354-88-1P 408354-99-4P 408355-01-1P

408355-35-1P 408355-43-1P 408355-45-3P

408355-60-2P 408355-83-9P 408356-07-0P

408356-31-0P 408356-37-6P 408356-43-4P

408356-45-6P 408356-48-9P 408356-62-7P

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601524-89-4P 601524-90-7P 601524-91-8P

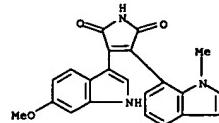
601524-92-9P 601524-93-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

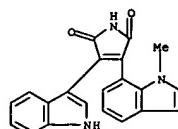
(indolo[6,7-*a*]pyrrolo[3,4-*c*]carbazoles as selective cyclin D1/CDK4 inhibitors)

RN 408354-39-2 CAPLUS

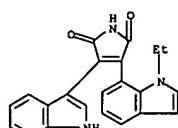
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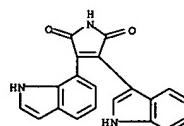
RN 408354-44-9 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI)  
 (CA INDEX NAME)



RN 408354-52-9 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(1-ethyl-1H-indol-7-yl)-4-(1H-indol-3-yl)- (9CI)  
 (CA INDEX NAME)



RN 408354-57-4 CAPLUS  
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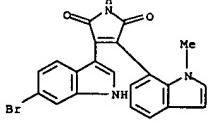


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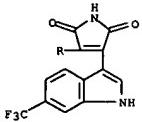
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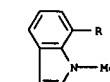
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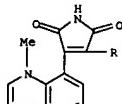
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 CN 1H-Pyrrole-2,5-dione,  
 3-(1-methyl-1H-indol-7-yl)-4-[6-(trifluoromethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



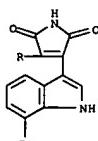
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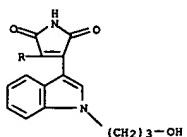
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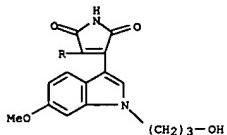
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 3-(7-bromo-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



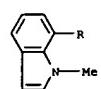
RN 408354-68-7 CAPLUS  
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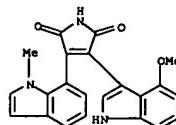
RN 408354-72-3 CAPLUS  
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3-(1-(3-hydroxypropyl)-6-methoxy-1H-indol-3-yl)-4-(1-  
methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



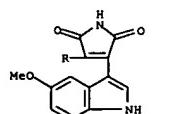
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y1)- (9CI) (CA INDEX NAME)



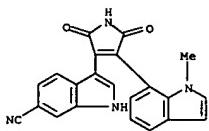
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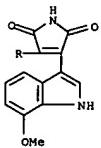
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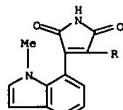
RN 408354-81-4 CAPLUS  
CN 1H-Indole-6-carbonitrile, 3-[2,5-dihydro-4-(1-methyl-1H-indol-7-yl)-2,5-  
dioxo-1H-pyrrol-3-yl]- (9CI) (CA INDEX NAME)



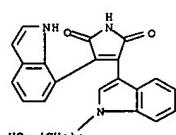
RN 408354-84-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(7-methoxy-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-  
y1)- (9CI) (CA INDEX NAME)



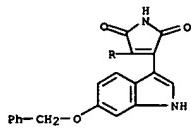
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CN 1H-Pyrrole-2,5-dione,  
3-(4-bromo-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)-  
(9CI) (CA INDEX NAME)



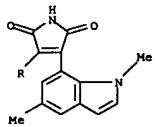
RN 408354-99-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[1-(3-hydroxypropyl)-1H-indol-3-yl]-4-(1H-indol-7-  
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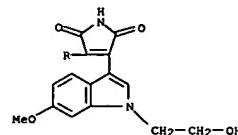
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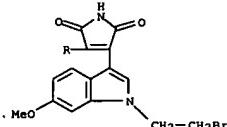
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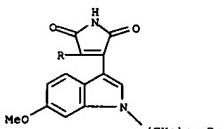
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CN 1H-Pyrrole-2,5-dione,  
3-[1-(2-hydroxyethyl)-6-methoxy-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



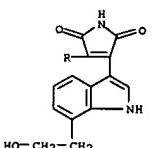
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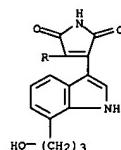
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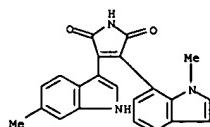
RN 408355-83-9 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
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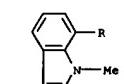
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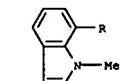
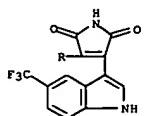


RN 408356-31-0 CAPLUS  
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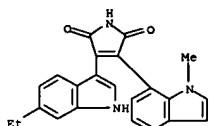


RN 408356-37-6 CAPLUS  
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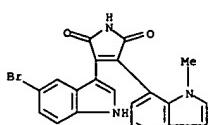




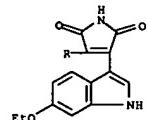
RN 408356-43-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(6-ethyl-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)-  
(9CI) (CA INDEX NAME)



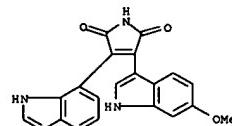
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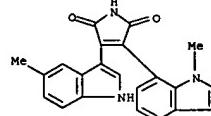
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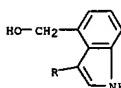
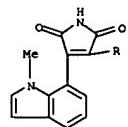
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(9CI) (CA INDEX NAME)



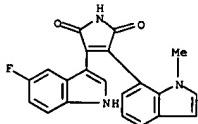
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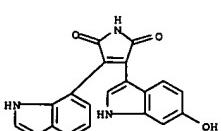
RN 601524-87-2 CAPLUS  
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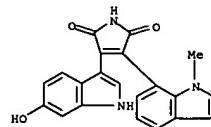
RN 601524-88-3 CAPLUS  
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yI)- (9CI) (CA INDEX NAME)



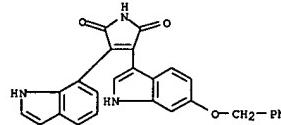
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(9CI) (CA INDEX NAME)



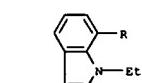
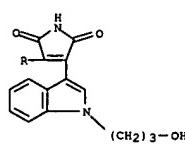
RN 601524-90-7 CAPLUS  
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yI)- (9CI) (CA INDEX NAME)



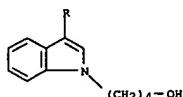
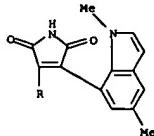
RN 601524-91-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-7-yl)-4-(6-(phenylmethoxy)-1H-indol-3-  
yI)- (9CI) (CA INDEX NAME)



RN 601524-92-9 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(1-ethyl-1H-indol-7-yl)-4-[1-(3-hydroxypropyl)-1H-  
indol-3-yl]- (9CI) (CA INDEX NAME)



RN 601524-93-0 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(1,5-dimethyl-1H-indol-7-yl)-4-[1-(4-hydroxybutyl)-  
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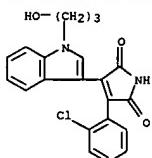


REFERENCE COUNT: 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

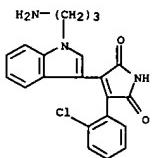
L6 ANSWER 38 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2003:261970 CAPLUS  
DOCUMENT NUMBER: 138:281150  
TITLE: Inhibitors of glycogen synthase kinase-3 for treating glaucoma  
INVENTOR(S): Heilberg, Mark R.; Clark, Abbot F.; Pang, Iok-Hou; Heilberg, Peggy Elizabeth; McNatt, Loretta Graves; Wang, Wan-Hui  
PATENT ASSIGNEE(S): Alcon, Inc., Switz.  
SOURCE: PCT Int. Appl., 35 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003027275	A1	20030403	WO 2002-US30059	20020923
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TU, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR				
CA 2460000	PA	20030403	CA 2002-2460000	20020923
EP 1430120	A1	20040623	EP 2002-799603	20020923
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, PI, RO, MK, CY, AL, TR, BG, CZ, EE, PT,				
BR 200212924	A	20050104	BR 2002-12924	20020923
JP 2005504101	T2	20050210	JP 2003-530847	20020923
US 2004186159	A1	20040923	US 2004-488496	20040302
ZA 2004001846	A	20050307	ZA 2004-1846	20040305
JP 2005320350	A2	20051117	JP 2005-211956	20050721
PRIORITY APPLN. INFO.:			US 2001-325390P	P 20010927
			JP 2003-530847	A3 20020923
			WO 2002-US30059	W 20020923

OTHER SOURCE(S): MARPAT 138:281150  
AB The use of inhibitors of glycogen synthase kinase-3 (GSK-3) useful for treating glaucoma is disclosed. The inhibitors are selected from the group consisting of imiduridine analogs, 2,4-diaminothiazole analogs, 1,2,4-triazolecarboxylic acid derivs. or analogs, hymenialidesine or derivs. or analogs, and paullone analogs. Preferred inhibitors comprise 3-[1-(3-amino-propyl)-3-indolyl]-4-(2-chlorophenyl)pyrrole-2,5-dione and 3-[1-(3-hydroxypropyl)-3-indolyl]-4-(2-chlorophenyl)pyrrole-2,5-dione. The compds. are formulated in pharmaceutical compns. suitable for topical delivery to the eye.  
IT 280744-10-7 280744-11-8  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(Inhibitors of glycogen synthase kinase-3 for treating glaucoma)  
RN 280744-10-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(2-chlorophenyl)-4-[1-(3-hydroxypropyl)-1H-indol-3-yi]- (9CI) (CA INDEX NAME)

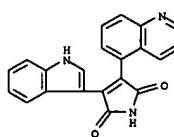


RN 280744-11-8 CAPLUS  
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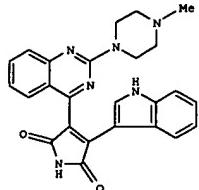
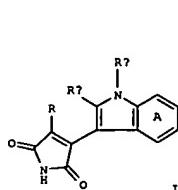
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 39 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2003:236058 CAPLUS  
DOCUMENT NUMBER: 139:127404  
TITLE: Synthesis of quinolinyl/isoquinolinyl[3,4-c]pyrrolo[3,4-c] carbazoles as cyclin D1/CDK4 inhibitors  
AUTHOR(S): Zhu, Guoxin; Conner, Scott; Zhou, Xun; Shih, Chuan; Brooks, Harold B.; Considerine, Eileen; Dempsey, Jack A.; Ogg, Cathy; Patel, Bharvin; Schultz, Richard M.; Spencer, Charles D.; Teicher, Beverly; Watkins, Scott A.  
CORPORATE SOURCE: A Division of Eli Lilly and Company, Lilly Research Laboratories, Lilly Corporate Center, Indianapolis, IN, 46285, USA  
SOURCE: Bioorganic & Medicinal Chemistry Letters (2003), 13(7), 1231-1235  
PUBLISHER: Elsevier Science B.V.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 139:127404  
AB A novel series of pyrrolo[3,4-c] carbazoles fused with a quinolinyl/isoquinolinyl moiety were synthesized and their D1/CDK4 inhibitory and antiproliferative activity were evaluated. Compound 14H-isoquinolinyl[6,5-a]-pyrrolo[3,4-c]carbazole-7,9-dione was found to be a highly potent D1/CDK4 inhibitor with an IC50 of 69 nM. One compd. also inhibited tumor cell growth, arrested tumor cells in G1 phase and inhibited pRb phosphorylation.  
IT 569337-80-0P 569337-82-2P 569337-84-4P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(synthesis of quinolinylisoquinolinylpyrrolocarbazoles as cyclin D1-CDK4 inhibitors)  
RN 569337-80-0 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yi)-4-(5-quinolinyl)- (9CI) (CA INDEX NAME)



RN 569337-82-2 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yi)-4-(5-isoquinolinyl)- (9CI) (CA INDEX NAME)





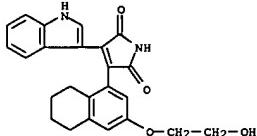
**AB** Title compds. I [Ra = H, alkyl; Rb = H, alkyl; R = (un)substituted Ph, naphthyl, quinazolinyl, pyrimidinyl, etc.; ring A is optionally substituted] were prepared. Examples include over 180 compds. and assays for activity with several protein kinase C (PKC) isoforms. For instance, 1H,3H-quinazolin-2,4-dione was converted to 2,4-dichloroquinazoline (POCl<sub>3</sub>, Me<sup>2</sup>NPh, 0°C) and used to alkylate Et acetoacetate (i. THF, NaH, 0°C; ii. PhMe, reflux; iii. NH4OH, overnight) resulting in the formation of 2-(2-chloroquinazolin-4-yl)acetamide. This was dissolved in NMP and reacted with excess N-methylpiperazine to give 2-(2-(4-methylpiperazin-1-yl)quinazolin-4-ylacetamide. Reaction of the acetamide with 3-indoleglyoxylic acid Me ester (THF, KOBu-t, 0°C → room temperature, overnight) provided II as an orange-red powder. II had IC<sub>50</sub> < 10 nM for PKC<sub>θ</sub>. I are useful for preventing or treating disorders or diseases mediated by T lymphocytes and/or PKC.

IT 425637-11-2P

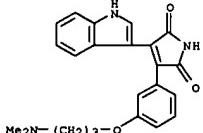
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses); (drug; preparation of indolylmaleimide derivs. as protein kinase c inhibitors)

RN 425637-11-2 CAPLUS

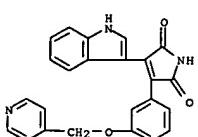
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-(5,6,7,8-tetrahydro-3-(2-hydroxyethoxy)-1-naphthalenyl)- (9CI) (CA INDEX NAME)



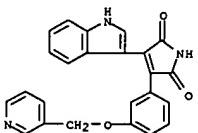
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425636-56-2P 425636-57-3P 425636-58-4P  
425636-59-5P 425636-60-8P 425636-61-9P  
425636-62-0P 425636-63-1P 425636-64-2P



RN 425636-56-2 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[3-(4-pyridinylmethoxy)phenyl]- (9CI) (CA INDEX NAME)



RN 425636-57-3 CAPLUS  
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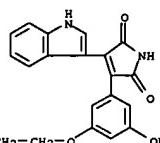
RN 425636-58-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[3-(2-hydroxyethoxy)phenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)

425636-65-3P 425636-66-4P 425636-67-5P  
425636-68-6P 425636-69-7P 425636-70-0P  
425636-71-1P 425636-72-2P 425636-73-3P  
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425636-77-7P 425636-78-8P 425636-79-9P  
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425637-04-3P 425637-06-5P 425637-08-7P  
425637-10-1P 425637-13-4P 425637-15-6P  
425638-62-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses); (drug; prepnn. of indolylmaleimide derivs. as protein kinase c inhibitors)

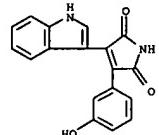
RN 425636-53-9 CAPLUS

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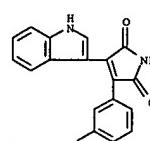
RN 425636-54-0 CAPLUS

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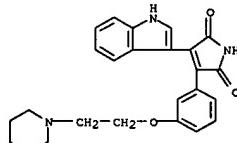
RN 425636-55-1 CAPLUS

CN 1H-Pyrrole-2,5-dione,  
3-[3-(2-(dimethylamino)propoxy)phenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



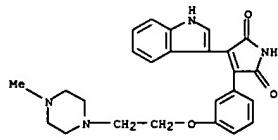
RN 425636-59-5 CAPLUS

CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[3-(2-(1-piperidinyl)ethoxy)phenyl]- (9CI) (CA INDEX NAME)



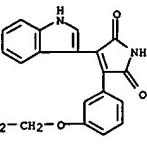
RN 425636-60-8 CAPLUS

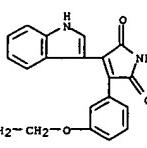
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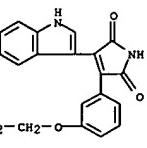


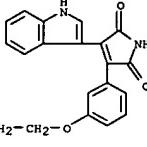
RN 425636-61-9 CAPLUS

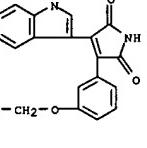
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[3-(2-(4-morpholinyl)ethoxy)phenyl]- (9CI) (CA INDEX NAME)

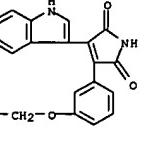
  
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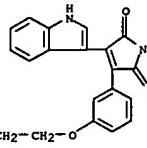
  
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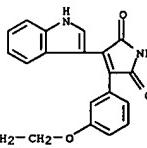
  
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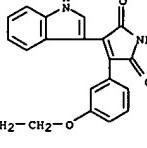
  
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 CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[3-(2-(1-pyrrolidinyl)ethoxy)phenyl]- (9CI) (CA INDEX NAME)

  
 RN 425636-69-7 CAPLUS  
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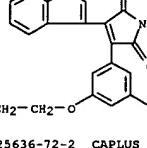
  
 RN 425636-70-0 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-[3-[(dimethylamino)methyl]phenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)

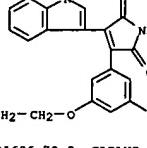
  
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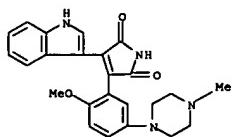
  
 RN 425636-66-4 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-[3-[2-[(2-hydroxyethyl)(phenylmethyl)amino]ethoxy]phenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)

  
 RN 425636-67-5 CAPLUS  
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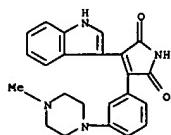
  
 RN 425636-71-1 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-[3-(2-(dimethylamino)ethoxy)-5-ethoxyphenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)

  
 RN 425636-72-2 CAPLUS  
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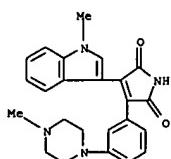
  
 RN 425636-73-3 CAPLUS  
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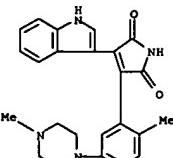
RN 425636-74-4 CAPLUS  
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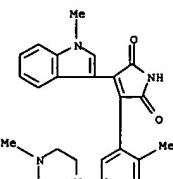
RN 425636-75-5 CAPLUS  
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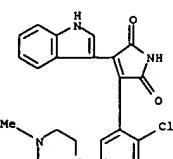
RN 425636-76-6 CAPLUS  
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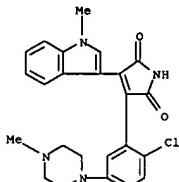
RN 425636-77-7 CAPLUS  
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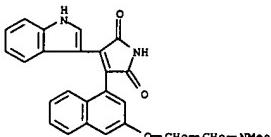
RN 425636-78-8 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(2-chloro-5-(4-methyl-1-piperazinyl)phenyl)-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



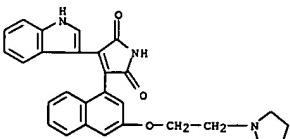
RN 425636-79-9 CAPLUS  
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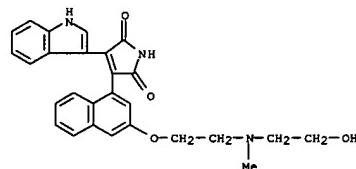
RN 425636-80-2 CAPLUS  
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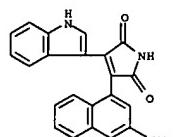
RN 425636-81-3 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[3-(2-(1-pyrrolidinyl)ethoxy]-1-naphthalenyl]- (9CI) (CA INDEX NAME)



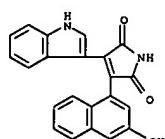
RN 425636-82-4 CAPLUS  
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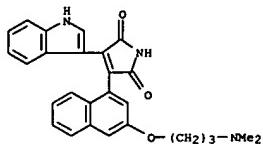
RN 425636-83-5 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-(3-methoxy-1-naphthalenyl)- (9CI) (CA INDEX NAME)



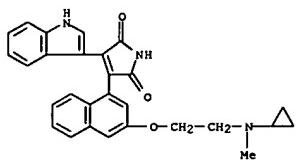
RN 425636-84-6 CAPLUS  
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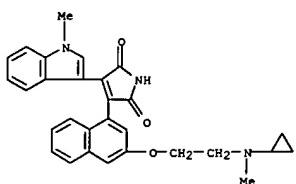
RN 425636-85-7 CAPLUS  
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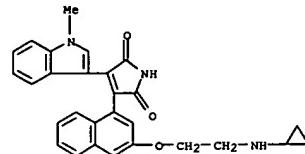
RN 425636-86-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[3-[2-(cyclopropylmethylamino)ethoxy]-1-naphthalenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



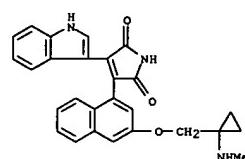
RN 425636-87-9 CAPLUS  
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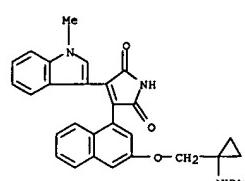
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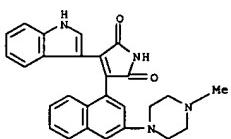
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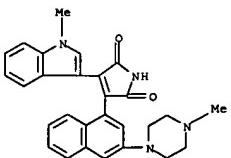
RN 425636-90-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[3-[(1-methylamino)cyclopropyl]methoxy]-1-naphthalenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



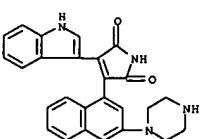
RN 425636-91-5 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[3-(4-methyl-1-piperazinyl)-1-naphthalenyl]- (9CI) (CA INDEX NAME)



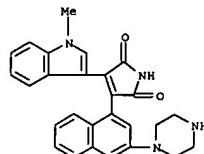
RN 425636-92-6 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[3-(4-methyl-1-piperazinyl)-1-naphthalenyl]- (9CI) (CA INDEX NAME)



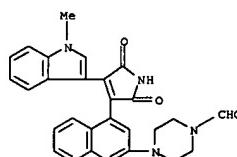
RN 425636-93-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[3-(1-piperazinyl)-1-naphthalenyl]- (9CI) (CA INDEX NAME)



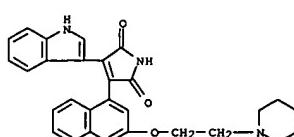
RN 425636-94-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[3-(1-piperazinyl)-1-naphthalenyl]- (9CI) (CA INDEX NAME)



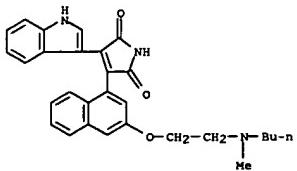
RN 425636-95-9 CAPLUS  
CN 1-Piperazinecarboxaldehyde, 4-[4-(2,5-dihydro-4-(1-methyl-1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl)-2-naphthalenyl]- (9CI) (CA INDEX NAME)



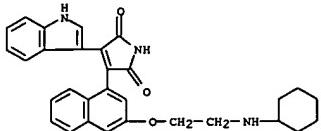
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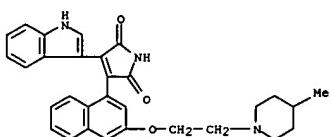
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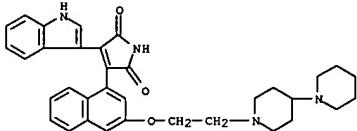
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 CN 1H-Pyrrole-2,5-dione, 3-[3-(2-(cyclohexylamino)ethoxy)-1-naphthalenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



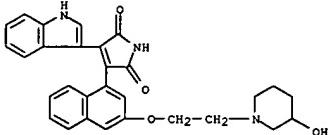
RN 425637-00-9 CAPLUS  
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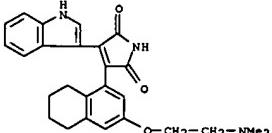
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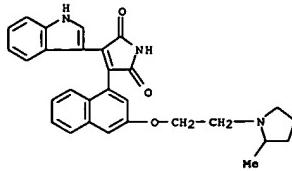
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 CN 1H-Pyrrole-2,5-dione, 3-[3-(2-(3-hydroxy-1-piperidinyl)ethoxy)-1-naphthalenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



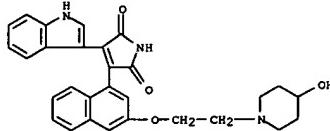
RN 425637-13-4 CAPLUS  
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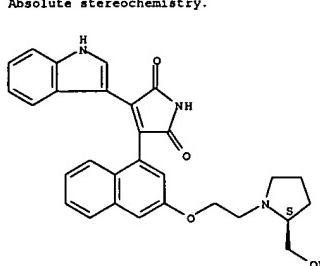
RN 425637-15-6 CAPLUS  
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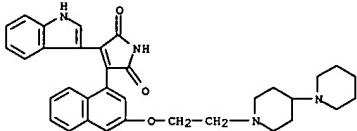
RN 425637-04-3 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-[3-(2-(4-hydroxy-1-piperidinyl)ethoxy)-1-naphthalenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



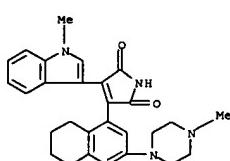
RN 425637-06-5 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-[3-(2-(2-hydroxymethyl-1-piperidinyl)ethoxy)-1-naphthalenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)  
 Absolute stereochemistry.



RN 425637-08-7 CAPLUS  
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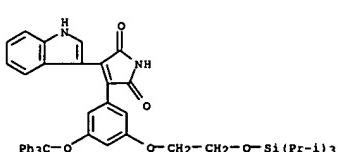


RN 425638-62-6 CAPLUS  
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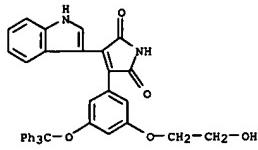


IT 425638-67-1P 425638-68-2P 425638-69-3P  
 425638-70-6P 425638-71-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (Intermediate) preparation of indolylmaleimide derivs. as protein kinase c inhibitors)

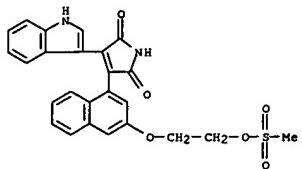
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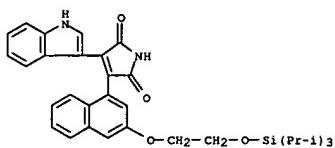
RN 425638-68-2 CAPLUS  
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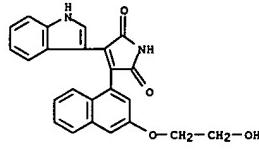
RN 425638-69-3 CAPLUS  
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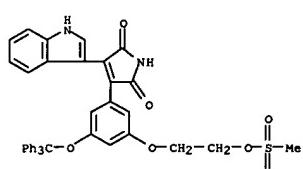
RN 425638-70-6 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[3-[2-[(tris(1-methylethyl)silyl)oxy]ethoxy]-1-naphthalenyl]- (9CI) (CA INDEX NAME)



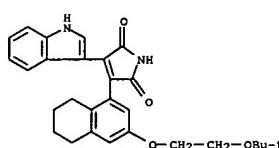
RN 425638-71-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(3-(2-hydroxyethoxy)-1-naphthalenyl)-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



IT 425638-78-4 425638-81-9  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reactant; preparation of indolymaleimide derivs. as protein kinase c inhibitors)  
RN 425638-78-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[3-[2-[(methylsulfonyl)oxy]ethoxy]-5-(triphenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)



RN 425638-81-9 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[3-[2-(1,1-dimethylethoxy)ethoxy]-5,6,7,8-tetrahydro-1-naphthalenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



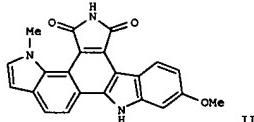
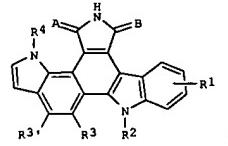
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 2002:275990 CAPLUS  
DOCUMENT NUMBER: 136:294729  
TITLE: Preparation and use of indolo-pyrrolo-carbazole derivatives as inhibitors of CDK4 kinase and methods for treating proliferative diseases  
INVENTOR(S): Engler, Thomas Albert; Furness, Kelly Wayne;  
Malhotra,  
Sushant; Briggs, Stephen Lyle; Brooks, Harold Burns;  
Clawson, David Keyes; Sanchez-Martinez, Concepcion;  
Zhang, Faming; Zhu, Guoxin  
PATENT ASSIGNEE(S): Eli Lilly and Company, USA  
SOURCE: PCT Int. Appl., 226 pp.  
CODEN: PIXXD2

DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002028861	A2	20020411	WO 2001-U527728	20010924
WO 2002028861	A3	20020801		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MM, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2001092579	A5	20020415	AU 2001-92579	20010924
EP 1325011	A2	20030709	EP 2001-972948	20010924
EP 1325011	B1	20040506		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
AT 266031	E	20040515	AT 2001-972948	20010924
PT 1325011	T	20040930	PT 2001-972948	20010924
ES 2220811	T3	20041216	ES 2001-1972948	20010924
US 2004048915	A1	20040311	US 2003-344245	20030207
PRIORITY APPLN. INFO.:			US 2000-236616P	P 20000929
			WO 2001-U527728	W 20010924

OTHER SOURCE(S): MARPAT 136:294729  
GI



AB Title compds. I (A, B = O, S; R1 = alkyl, alkoxy, hydroxy(alkyl), halo(alkyl), CN, alkylamino, alkyl-ester; R2 = H, alkyl, hydroxy-alkyl, alkylamino, alkylamido, alkyl ester; R3-3' = H, alkyl, alkoxy, halo; R4 = H, alkyl) were prepared. For instance, 3-(6-Methoxy-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione was prepared by reaction of 2-(1-methyl-1H-indol-7-yl)acetamide (preparation given) and (6-methoxy-1H-indol-3-yl)- $\alpha$ -oxoacetic acid Me ester (THF, KOBu-t, 0°C, 20 min). Cyclization of the intermediate pyrrole-2,5-dione was effected photochem. (EtOAc, 450W Hanovia lamp) in the presence of DDQ to give II. II had IC50 = 0.043  $\mu$ M for CDK4 kinase using the RBiNG substrate. I are useful in the treatment of cell proliferative disorders, including cancer.

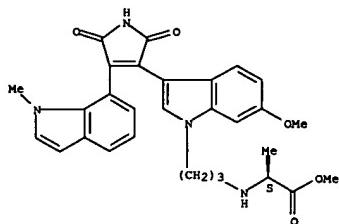
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408355-86-2P 408355-87-3P 408355-88-4P  
408355-90-8P 408355-91-9P 408355-94-2P  
408355-95-3P 408355-97-5P 408355-98-6P  
408355-99-7P 408356-00-3P 408356-01-4P  
408356-17-2P 408496-77-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drugs; preparation and use of indolo-pyrrolo-carbazole derivs. as inhibitors of CDK4 kinase and methods for treating proliferative diseases)

RN 408355-79-3 CAPLUS  
CN L-Alanine, N-[3-(2,5-dihydro-4-(1-methyl-1H-indol-7-yl)-2,5-dioxo-1H-pyrrol-3-yl)-6-methoxy-1H-indol-1-yl]propyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

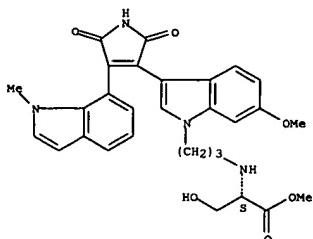


RN 408355-81-7 CAPLUS  
CN L-Serine, N-[3-(3-{2,5-dihydro-4-(1-methyl-1H-indol-7-yl)-2,5-dioxo-1H-pyrrol-3-yl}-6-methoxy-1H-indol-1-yl)propyl]-, methyl ester, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 408355-80-6  
CMF C29 H30 N4 O6

Absolute stereochemistry. Rotation (+).

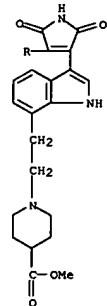


CM 2

CRN 76-05-1  
CMF C2 H F3 O2

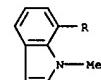
RN 408355-85-1 CAPLUS  
CN 4-Piperidinecarboxylic acid, 1-[2-{3-[2,5-dihydro-4-(1-methyl-1H-indol-7-yl)-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-7-yl}ethyl]-, methyl ester (9CI) (CA INDEX NAME)

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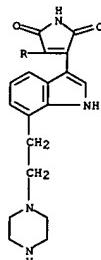
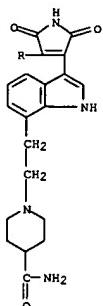


RN 408355-86-2 CAPLUS  
CN 4-Piperidinecarboxamide, 1-[2-{3-[2,5-dihydro-4-(1-methyl-1H-indol-7-yl)-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-7-yl}ethyl]- (9CI) (CA INDEX NAME)

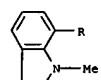
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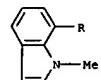


RN 408355-87-3 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-7-yl)-4-[7-(2-(1-piperazinyl)ethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

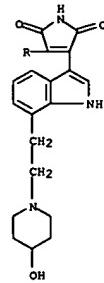
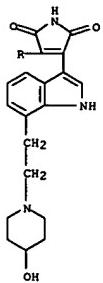
PAGE 1-A

RN 408355-88-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[7-(2-(4-hydroxy-1-piperidinyl)ethyl)-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

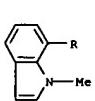
PAGE 2-A



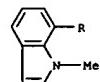
PAGE 1-A



RN 408355-90-8 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-[7-(2-(4-hydroxy-1-piperidinyl)ethyl)-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)-, monohydrochloride (9CI) (CA INDEX NAME)



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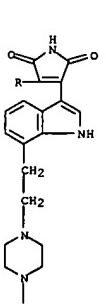


● HCl

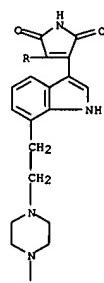
RN 408355-91-9 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-[7-[2-[(2S)-2-(hydroxymethyl)-1-pyrrolidinyl]ethyl]-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

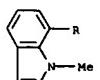
RN 408355-94-2 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-7-yl)-4-(7-(2-(4-methyl-1-piperazinyl)ethyl)-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



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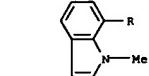


RN 408355-97-5 CAPLUS  
 CN Methanesulfonic acid, trifluoro-, compd. with 3-[7-[2-[(2-hydroxyethyl)amino]ethyl]-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)-1H-pyrrole-2,5-dione (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 408355-96-4  
 CMF C25 H24 N4 O3

HO-CH<sub>2</sub>-CH<sub>2</sub>-NH-CH<sub>2</sub>-CH<sub>2</sub>



CN 2

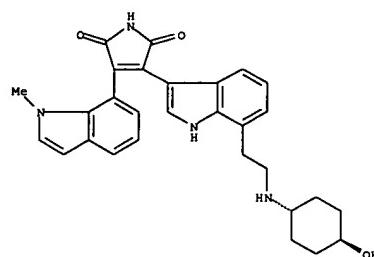
 CRN 1493-13-6  
 CMF C H F3 O3 S

 RN 408355-99-6 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-[7-[2-[(dimethylamino)ethyl]amino]ethyl]-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

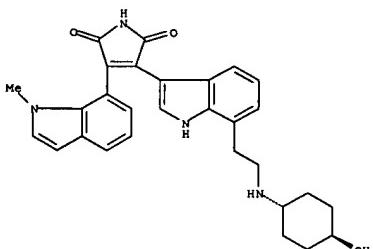
Me<sub>2</sub>N-CH<sub>2</sub>-CH<sub>2</sub>-NH-CH<sub>2</sub>-CH<sub>2</sub>


 RN 408355-99-7 CAPLUS  
 CN 1H-Pyrrole-2,5-dione,  
 3-[7-[2-[(trans-4-hydroxycyclohexyl)amino]ethyl]-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

Relative stereochemistry.


 RN 408356-00-3 CAPLUS  
 CN 1H-Pyrrole-2,5-dione,  
 3-[7-[2-[(trans-4-hydroxycyclohexyl)amino]ethyl]-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)-, monohydrochloride (9CI) (CA INDEX NAME)

Relative stereochemistry.



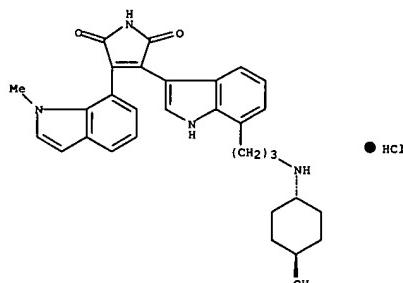
● HCl

 RN 408356-01-4 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-[7-[2-[(trans-4-aminocyclohexyl)amino]ethyl]-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)-, monohydrochloride (9CI) (CA INDEX NAME)

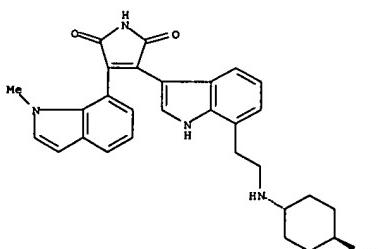
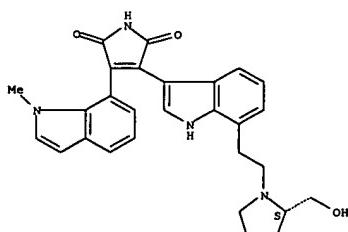
Relative stereochemistry.

 CN 1H-Pyrrole-2,5-dione,  
 3-[7-[2-[(trans-4-hydroxycyclohexyl)amino]propyl]-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)-, monohydrochloride (9CI) (CA INDEX NAME)

Relative stereochemistry.


 RN 408496-77-5 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-[7-[2-[(2S)-2-(hydroxymethyl)-1-pyrrolidinyl]ethyl]-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



● HCl

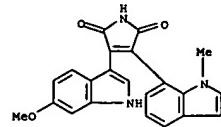
L6 ANSWER 42 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

61 408354-49-9P, 3-(1H-Indol-3-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408354-52-9P, 3-(1H-Indol-3-yl)-4-(1-ethyl-1H-indol-7-yl)pyrrole-2,5-dione 408354-56-3P, 3-(1H-Indol-3-yl)-4-(1-(2-(trimethylsilyl)ethoxy)methyl)-1H-indol-7-ylpyrrole-2,5-dione 408354-57-4P, 3-(1H-Indol-7-yl)-4-(1H-indol-3-yl)pyrrole-2,5-dione 408354-59-6P, 3-(6-Bromo-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408354-61-0P, 3-(6-Trifluoromethyl-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408354-63-2P, 3-(4-Fluoro-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408354-64-3P, 3-(7-Bromo-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408354-68-7P, 3-[1-(3-Hydroxypropyl)-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408354-72-3P, 3-[1-(3-Hydroxypropyl)-6-methoxy-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408354-75-6P, 3-(4-Methoxy-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408354-77-6P, 3-(5-Methoxy-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408354-79-0P, 3-(6-Fluoro-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408354-81-4P, 3-(6-Chloro-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408354-84-7P, 3-(7-Methoxy-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408354-91-4P, 3-(1-(3-Hydroxypropyl)-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408354-93-4P, 3-[1-(3-Hydroxypropyl)-1H-indol-7-yl]-4-(1H-indol-3-yl)pyrrole-2,5-dione 408355-01-1P, 3-(1,5-Dimethoxy-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408355-07-7P, 3-(1,5-Dimethyl-1H-indol-3-yl)-4-(1H-indol-7-yl)pyrrole-2,5-dione 408355-09-9P, 3-(1,5-Dimethyl-1H-indol-7-yl)-4-(1-(3-Hydroxypropyl)-1H-indol-3-yl)pyrrole-2,5-dione 408355-16-0P, 3-(1,5-Dimethyl-1H-indol-7-yl)-4-(6-fluoro-1H-indol-3-yl)pyrrole-2,5-dione 408355-19-1P, 3-(1,5-Dimethyl-1H-indol-7-yl)-4-(6-methoxy-1H-indol-3-yl)pyrrole-2,5-dione 408355-21-5P, 3-(1,5-Dimethyl-1H-indol-7-yl)-4-(6-trifluoromethyl-1H-indol-3-yl)pyrrole-2,5-dione 408355-26-0P, 3-(1-Methyl-5-fluoro-1H-indol-7-yl)-4-(1H-indol-3-yl)pyrrole-2,5-dione 408355-43-1P, 3-[1-(2-Hydroxyethyl)-6-methoxy-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408355-45-3P, 3-[1-(2-Bromomethyl)-6-methoxy-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408355-60-2P, 3-[1-(3-Bromopropyl)-6-methoxy-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408355-78-2P, 408355-82-0P, 3-[1-(2-Bromomethyl)-1H-indol-7-yl]pyrrole-2,5-dione 408355-07-0P, 3-[7-(3-Hydroxypropyl)-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408355-10-0P, 3-[7-(3-Bromopropyl)-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408355-31-0P, 3-[6-Methyl-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408355-33-2P, 408355-37-6P, 3-(5-Trifluoromethyl-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408355-46-0P, 3-(6-Ethyl-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408355-45-6P, 3-(5-Bromo-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408355-60-5P, N-(2-Hydroxyethyl)-N-[3-[4-(1-methyl-1H-indol-7-yl)-2,5-dioxo-2,5-dihydro-1H-pyrrrol-3-yl]-1H-indol-7-yl]acetamide 408355-62-7P, 3-(1H-Indol-7-yl)-4-(6-methoxy-1H-indol-3-yl)pyrrole-2,5-dione 408355-49-6P

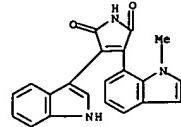
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (intermediate; prepn. and use of indolo-pyrrolo-carbazole derivs. as inhibitors of CDK4 kinase and methods for treating proliferative diseases)

L6 ANSWER 42 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

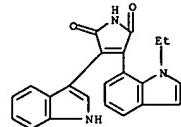
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



RN 408354-44-9 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

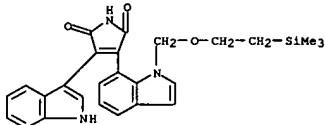


RN 408354-52-9 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(1-ethyl-1H-indol-7-yl)-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)

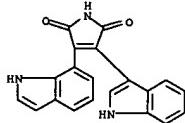


RN 408354-56-3 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[1-[(2-(trimethylsilyl)ethoxy)methyl]-1H-indol-7-yl]- (9CI) (CA INDEX NAME)

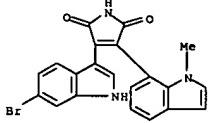
L6 ANSWER 42 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 408354-57-4 CAPLUS  
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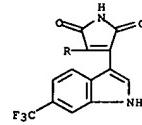


RN 408354-59-6 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(6-bromo-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

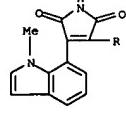


RN 408354-61-0 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-7-yl)-4-[6-(trifluoromethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

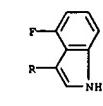
L6 ANSWER 42 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

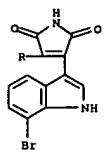


RN 408354-63-2 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(4-fluoro-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

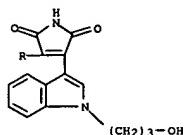


RN 408354-64-3 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(7-bromo-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

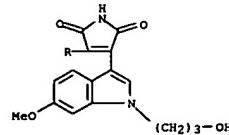
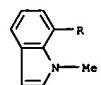




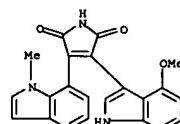
RN 408354-68-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[1-(3-hydroxypropyl)-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



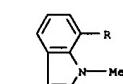
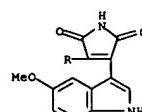
RN 408354-72-3 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[1-(3-hydroxypropyl)-6-methoxy-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



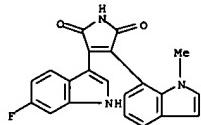
RN 408354-75-6 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(4-methoxy-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



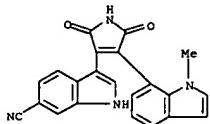
RN 408354-77-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(5-methoxy-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



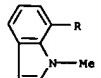
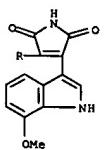
RN 408354-79-0 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



RN 408354-81-4 CAPLUS  
CN 1H-Indole-6-carbonitrile, 3-[2,5-dihydro-4-(1-methyl-1H-indol-7-yl)-2,5-dioxo-1H-pyrrrol-3-yl]- (9CI) (CA INDEX NAME)

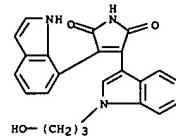


RN 408354-84-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(7-methoxy-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

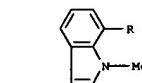
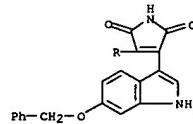


RN 408354-99-4 CAPLUS

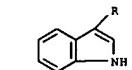
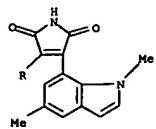
CN 1H-Pyrrole-2,5-dione,  
3-[1-(3-hydroxypropyl)-1H-indol-3-yl]-4-(1H-indol-7-yl)- (9CI) (CA INDEX NAME)



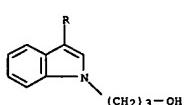
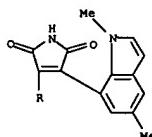
RN 408355-01-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-7-yl)-4-(6-(phenylmethoxy)-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



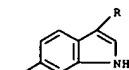
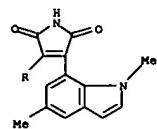
RN 408355-07-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1,5-dimethyl-1H-indol-7-yl)-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



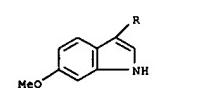
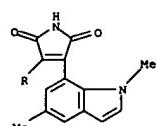
RN 408355-09-9 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1,5-dimethyl-1H-indol-7-yl)-4-[1-(3-hydroxypropyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



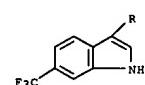
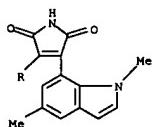
RN 408355-16-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(1,5-dimethyl-1H-indol-7-yl)-4-(6-fluoro-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



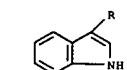
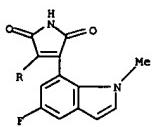
RN 408355-19-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(1,5-dimethyl-1H-indol-7-yl)-4-(6-methoxy-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



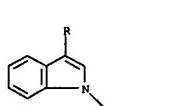
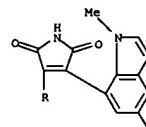
RN 408355-21-5 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1,5-dimethyl-1H-indol-7-yl)-4-(6-trifluoromethyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



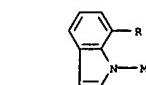
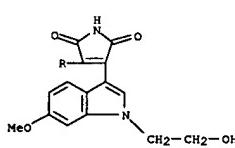
RN 408355-26-0 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(5-fluoro-1-methyl-1H-indol-7-yl)-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



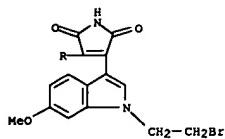
RN 408355-29-3 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(5-fluoro-1-methyl-1H-indol-7-yl)-4-[1-(3-hydroxypropyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



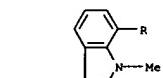
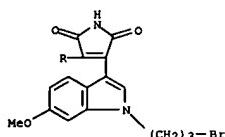
RN 408355-43-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[1-(2-hydroxyethyl)-6-methoxy-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



RN 408355-45-3 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[1-(2-bromoethyl)-6-methoxy-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

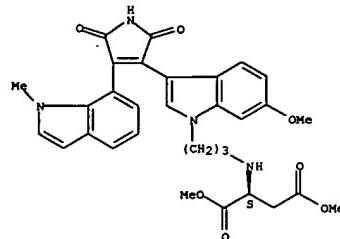


RN 408355-60-2 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[1-(3-bromopropyl)-6-methoxy-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

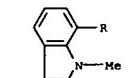
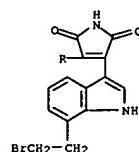


RN 408355-78-2 CAPLUS  
CN L-Aspartic acid,  
N-[3-(2,5-dihydro-4-(1-methyl-1H-indol-7-yl)-2,5-dioxo-1H-pyrrol-3-yl)-6-methoxy-1H-indol-1-yl]propyl-, dimethyl ester (9CI)  
(CA INDEX NAME)

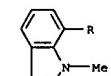
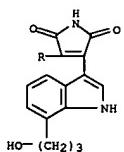
Absolute stereochemistry.



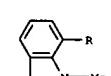
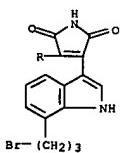
RN 408355-82-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(7-(2-bromoethyl)-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



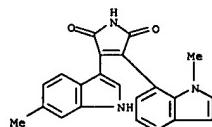
RN 408356-07-0 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(7-(3-hydroxypropyl)-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



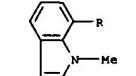
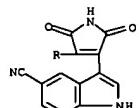
RN 408356-08-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(7-(3-bromopropyl)-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



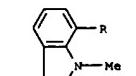
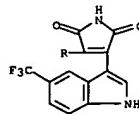
RN 408356-31-0 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-7-yl)-4-(6-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



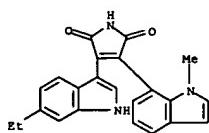
RN 408356-33-2 CAPLUS  
CN 1H-Indole-5-carbonitrile, 3-[2,5-dihydro-4-(1-methyl-1H-indol-7-yl)-2,5-dioxo-1H-pyrrol-3-yl]- (9CI) (CA INDEX NAME)



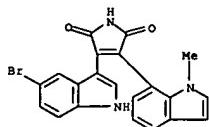
RN 408356-37-6 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(1-methyl-1H-indol-7-yl)-4-(5-(trifluoromethyl)-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



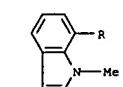
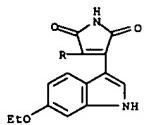
RN 408356-43-4 CAPLUS  
 CN 1H-Pyrrole-2,5-dione,  
 3-(6-ethyl-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)-  
 (9CI) (CA INDEX NAME)



RN 408356-45-6 CAPLUS  
 CN 1H-Pyrrole-2,5-dione,  
 3-(5-bromo-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)-  
 (9CI) (CA INDEX NAME)

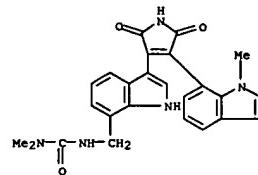


RN 408356-48-9 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(6-ethoxy-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-  
 yl)- (9CI) (CA INDEX NAME)

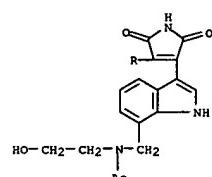


RN 408356-54-7 CAPLUS

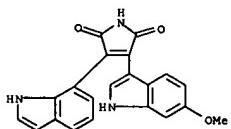
N'-[(3-[2,5-dihydro-4-(1-methyl-1H-indol-7-yl)-2,5-dioxo-1H-pyrrol-3-  
 yl]-1H-indol-7-yl)methyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)



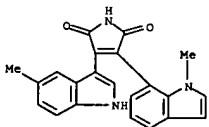
RN 408356-60-5 CAPLUS  
 CN Acetamide, N-[3-[2,5-dihydro-4-(1-methyl-1H-indol-7-yl)-2,5-dioxo-1H-pyrrol-3-  
 yl]-1H-indol-7-yl]methyl]-N-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



RN 408356-62-7 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-7-yl)-4-(6-methoxy-1H-indol-3-yl)-  
 (9CI) (CA INDEX NAME)



RN 408358-49-6 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-7-yl)-4-(5-methyl-1H-indol-3-  
 yl)- (9CI) (CA INDEX NAME)

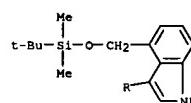
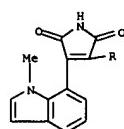


IT 408354-86-9, 3-[4-((tert-Butyldimethylsilyloxy)methyl)-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408354-88-1,  
 3-(4-Bromo-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione  
 408354-91-6, 3-(1-(3-Hydroxypropyl)-4-hydroxymethyl-1H-indol-3-yl)-  
 4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408354-93-8,  
 3-(1-(3-Hydroxypropyl)-4-bromo-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-  
 yl)pyrrole-2,5-dione 408354-95-0, 3-[1-(3-Hydroxypropyl)-4-  
 methoxy-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione  
 408355-35-1, 3-(1,5-Dimethyl-1H-indol-7-yl)-4-(1-methyl-1H-indol-3-  
 yl)pyrrole-2,5-dione 408355-83-9, 3-[7-(2-Hydroxyethyl)-1H-indol-  
 3-yl]-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione

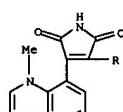
RL: RCT (Reactant); RACT (Reactant or reagent)

(reactant; preparation and use of indolo-pyrrolo-carbazole derivs. as  
inhibitors of CDK4 kinase and methods for treating proliferative  
diseases)

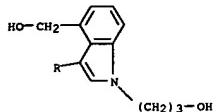
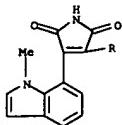
RN 408354-86-9 CAPLUS  
 CN 1H-Pyrrole-2,5-dione,  
 3-[4-[(1,1-dimethylethyl)dimethylsilyloxy]methyl]-  
 1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



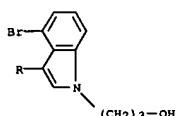
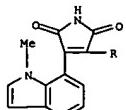
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 (9CI) (CA INDEX NAME)



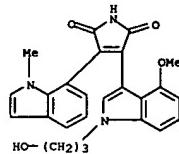
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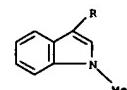
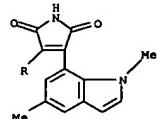
RN 408354-93-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(4-bromo-1-(3-hydroxypropyl)-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



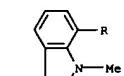
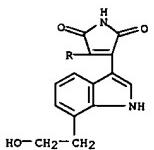
RN 408354-95-0 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[(3-hydroxypropyl)-4-methoxy-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



RN 408355-35-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-(1,5-dimethyl-1H-indol-7-yl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



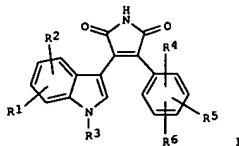
RN 408355-83-9 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
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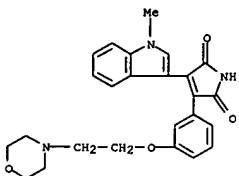
L6 ANSWER 43 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2002:107338 CAPLUS  
DOCUMENT NUMBER: 136:167378  
TITLE: Preparation of 3-indolyl-4-phenyl-1H-pyrrole-2,5-dione derivatives as inhibitors of glycogen synthase kinase-3beta for therapeutic agents  
INVENTOR(S): Gong, Leyi; Grube, Andrew; Peltz, Gary Allen  
PATENT ASSIGNEE(S): F. Hoffmann-La Roche A.-G., Switz.  
SOURCE: PCT Int. Appl., 105 pp.  
CODEN: PIXKD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002010158	A2	20020207	WO 2001-EP8293	20010718
WO 2002010158	A3	20020516		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, C2, DE, DK, DM, D2, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TU, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TU, TM, RW: GH, GM, KE, LS, MM, MZ, SD, SL, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG	AA	20020207	CA 2001-2417277	20010718
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EP 1307447	A2	20030507	EP 2001-974083	20010718
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BR 2001012965	A	20030708	BR 2001-12965	20010718
JP 2004505078	T2	20040219	JP 2002-515887	20010718
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AT 284885	E	20050115	AT 2001-974083	20010718
ES 2233691	T3	20050616	ES 2001-1974083	20010718
US 2002052397	A1	20020502	US 2001-916706	20010727
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US 2002188018	A1	20021212	US 2002-139410	20020506
ZA 2003000216	A	20040408	ZA 2003-216	20030108
NO 2003000328	A	20030122	NO 2003-328	20030122
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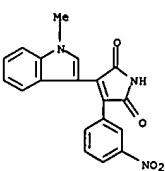
OTHER SOURCE(S): MARPAT 136:167378  
GI



- AB** The title compds. [I; R1, R2 = H, alkyl, halogen, haloalkyl, alkylthio, HO, alkoxy, cyano, nitro, amino, acylamino, monoalkylamino, or dialkylamino; R3 represents hydrogen, alkyl, cycloalkyl, heteroalkyl, dialkylamino, or dialkylamino; R4 = H, alkyl, halogen, haloalkyl, alkylthio, hydroxy, alkoxy, cyano, nitro, amino, acylamino, monoalkylamino, or dialkylamino; R5 = H, heteroalkyl, heterocyclyl, heterocyclicalkyl, heteroalkyl-substituted heterocyclyl, heteroalkyl-substituted cycloalkyl, heterosubstituted cycloalkyl, OR8, -SO(O)NR8 (wherein n = an integer from 0 to 2; and R8 is heteroalkyl, heteroalkyl, heterocyclyl, or heterocyclicalkyl); NR9R10 (wherein R9 = hydrogen, alkyl; R10 = heterosubstituted cycloalkyl, heteroalkyl, heterocyclyl, heterocyclicalkyl, or -X-(alkylene)-Y-Z (wherein X = a covalent bond, O, NH, or S(O)n; where n = an integer from 0 to 2; Y = O, NH, or S and Z = heteroalkyl or SiR1(R12)(R13) (where R11, R12, R13 are independently hydrogen or alkyl)), or R6 together with adjacent R4 forms a methylenedioxyl or ethylenedioxyl group] or pharmaceutically acceptable salts thereof are prepared. Owing to the inhibitory activity against glycogen synthase kinase-3 $\beta$  (GSK-3 $\beta$ ), these compds. may be used for the treatment of GSK-3 $\beta$  mediated diseases. More specifically, they are used for the treatment of GSK-3 $\beta$  mediated diseases selected from Alzheimer's disease, obesity, diabetes, atherosclerotic cardiovascular disease, polycystic ovary syndrome, syndrome X, ischemia, traumatic brain injury, bipolar disorder, immunodeficiency, cancer, allergy, and asthma in a mammal. The present inhibitor of GSK-3 $\beta$  is also used for the treatment of a disease characterized by an excess of CD4+T2 cytokines, which is asthma, allergy or allergic rhinitis or for the treatment of a disease characterized by an excess IgE production, which is asthma, allergy or allergic rhinitis.
- The** GSK-3 $\beta$  inhibitor is preferably at least 10 fold more selective for GSK-3 $\beta$  relative to PKC. Thus, Mitsunobu reaction of Me 3-hydroxyphenylacetate with 2-chloroethanol using Ph3P and diisopropyl azodicarboxylate in THF at room temperature overnight gave Me 3-(2-chloroethoxy)phenylacetate which was saponified with aqueous LiOH and treated with AcOH to give 3-(2-chloroethoxy)phenylacetic acid (II) which was converted into 3-(1-methylindol-3-yl)-4-[3-(2-aminoethoxy)-phenyl]-1H-pyrrole-2,5-dione (III) in 4 steps. III in vitro showed IC50 of 0.02  $\mu$ M against GSK-3 $\beta$ .
- IT** 396090-78-1P  
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(Intermediate; preparation of (indolylphenyl)-1H-pyrroleidine derivs.)
- as** inhibitors of glycogen synthase kinase-3 $\beta$  for therapeutic agents
- RN** 396090-83-8  
**CN** 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[3-(2-(4-morpholinyl)ethoxy)phenyl]- (9CI) (CA INDEX NAME)



- IT** 125314-03-6P 125314-13-8P 396090-84-9P  
396090-95-2P 396091-00-2P 396091-06-8P  
396091-14-8P 396091-15-9P 396091-19-3P  
396091-20-6P 396091-31-9P 396091-32-0P  
396091-33-1P 396091-40-0P 396091-46-6P  
396091-47-7P 396091-56-8P 396091-62-6P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(Intermediate; preparation of (indolylphenyl)-1H-pyrroleidine derivs.)
- as** inhibitors of glycogen synthase kinase-3 $\beta$  for therapeutic agents
- RN** 125314-03-6  
**CN** 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-(3-nitrophenyl)- (9CI) (CA INDEX NAME)

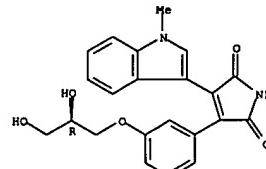


- RN** 125314-13-8  
**CN** 1H-Pyrrole-2,5-dione, 3-(3-aminophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

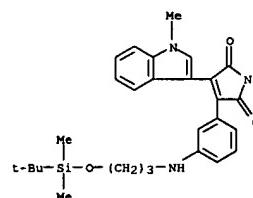
L6 ANSWER 43 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
(intermediate; prepn. of (indolylphenyl)-1H-pyrroleidine derivs. as inhibitors of glycogen synthase kinase-3 $\beta$  for therapeutic agents)

**RN** 396091-78-1  
**CN** 1H-Pyrrole-2,5-dione,  
3-[3-[(2R)-2,3-dihydroxypropoxy]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



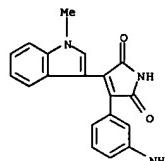
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**CN** 1H-Pyrrole-2,5-dione,  
3-[3-[(1,1-dimethylethyl)dimethylsilyl]oxy]propylaminophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



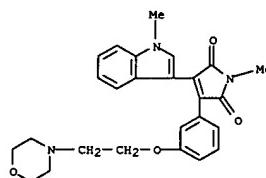
**IT** 396090-83-8P  
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(Intermediate; preparation of (indolylphenyl)-1H-pyrroleidine derivs.)

**as** inhibitors of glycogen synthase kinase-3 $\beta$  for therapeutic agents

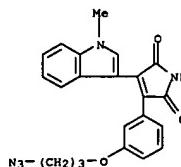
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**CN** 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[3-(2-(4-morpholinyl)ethoxy)phenyl]- (9CI) (CA INDEX NAME)



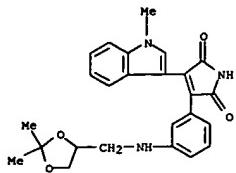
**RN** 396090-84-9  
**CN** 1H-Pyrrole-2,5-dione, 1-methyl-3-(1-methyl-1H-indol-3-yl)-4-[3-(2-(4-morpholinyl)ethoxy)phenyl]- (9CI) (CA INDEX NAME)



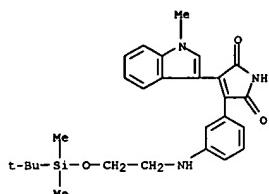
**RN** 396090-95-2  
**CN** 1H-Pyrrole-2,5-dione,  
3-(3-azidopropoxy)phenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



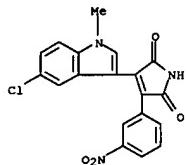
**RN** 396091-00-2  
**CN** 1H-Pyrrole-2,5-dione, 3-[3-[(2,2-dimethyl-1,3-dioxolan-4-y) methyl]amino]phenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



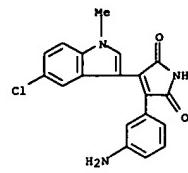
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CN 1H-Pyrrole-2,5-dione,  
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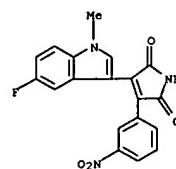
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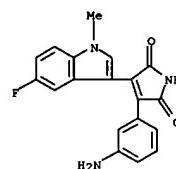
RN 396091-15-9 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(3-aminophenyl)-4-(5-chloro-1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



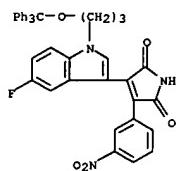
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CN 1H-Pyrrole-2,5-dione, 3-(5-fluoro-1-methyl-1H-indol-3-yl)-4-(3-nitrophenyl)- (9CI) (CA INDEX NAME)



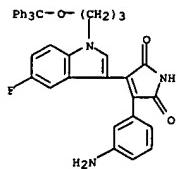
RN 396091-20-6 CAPLUS  
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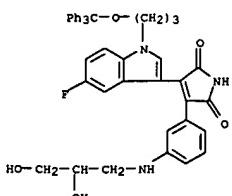
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CN 1H-Pyrrole-2,5-dione,  
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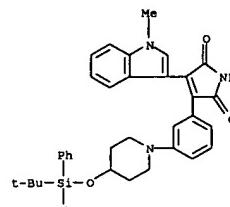
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CN 1H-Pyrrole-2,5-dione, 3-(3-aminophenyl)-4-(5-fluoro-1-[(3-(triphenylmethoxy)propyl)-1H-indol-3-yl]-1H-pyrrole-2,5-dione)- (9CI) (CA INDEX NAME)



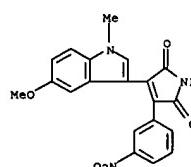
RN 396091-33-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
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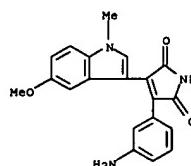
RN 396091-40-0 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[3-[(1,1-dimethylethyl)diphenylsilyloxy]-1-piperidinyl]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 396091-46-6 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(5-methoxy-1-methyl-1H-indol-3-yl)-4-(3-nitrophenyl)- (9CI) (CA INDEX NAME)

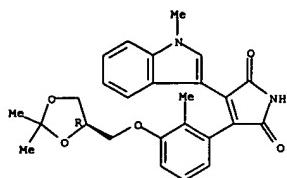


RN 396091-47-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(3-aminophenyl)-4-(5-methoxy-1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



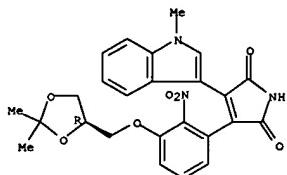
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CN 1H-Pyrrole-2,5-dione,  
3-[3-[(4R)-2,2-dimethyl-1,3-dioxolan-4-yl]methoxy]-  
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Absolute stereochemistry.



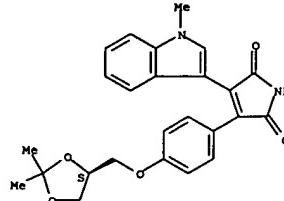
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CN 1H-Pyrrole-2,5-dione,  
3-[3-[(4R)-2,2-dimethyl-1,3-dioxolan-4-yl]methoxy]-  
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Absolute stereochemistry.

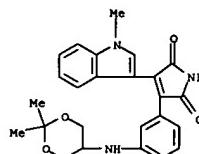


IT 396090-76-9P 396091-02-4P  
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
(preparation of (indolylphenyl)-1H-pyrroledione derivs. as inhibitors  
of  
glycogen synthase kinase-3B for therapeutic agents)  
RN 396090-76-9 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[4-[(4S)-2,2-dimethyl-1,3-dioxolan-4-yl]methoxyphenyl]-4-(1-methyl-1H-indol-3-yl) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.



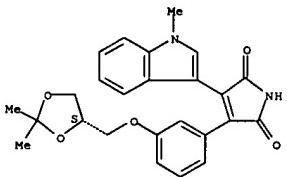
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CN 1H-Pyrrole-2,5-dione,  
3-[3-[(2R)-2,2-dimethyl-1,3-dioxolan-5-yl]amino]phenyl]-4-  
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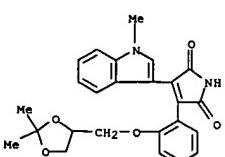
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396091-69-3P 396091-70-6P 396091-71-7P  
396091-72-0P  
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of (indolylphenyl)-1H-pyrroledione derivs. as inhibitors  
of  
glycogen synthase kinase-3B for therapeutic agents)

RN 396090-71-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[3-[(4S)-2,2-dimethyl-1,3-dioxolan-4-yl]methoxyphenyl]-4-(1-methyl-1H-indol-3-yl) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

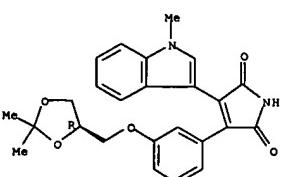


RN 396090-75-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[2-[(4S)-2,2-dimethyl-1,3-dioxolan-4-yl]methoxyphenyl]-4-(1-methyl-1H-indol-3-yl) - (9CI) (CA INDEX NAME)



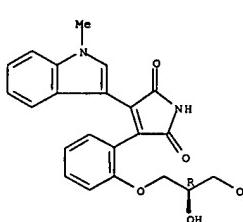
RN 396090-77-0 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[3-[(4R)-2,2-dimethyl-1,3-dioxolan-4-yl]methoxyphenyl]-4-(1-methyl-1H-indol-3-yl) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.



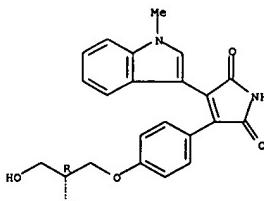
RN 396090-80-5 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[2-[(2R)-2,3-dihydroxypropoxy]phenyl]-4-(1-methyl-  
1H-indol-3-yl) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.



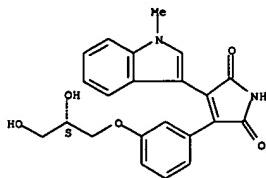
RN 396090-81-6 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[4-[(2R)-2,3-dihydroxypropoxy]phenyl]-4-(1-methyl-  
1H-indol-3-yl) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

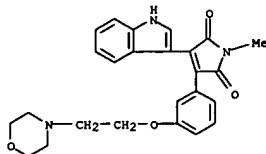


RN 396090-82-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[3-[(2S)-2,3-dihydroxypropoxy]phenyl]-4-(1-methyl-  
1H-indol-3-yl) - (9CI) (CA INDEX NAME)

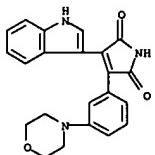
Absolute stereochemistry.



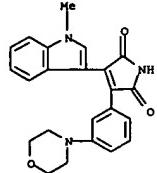
RN 396090-86-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-1-methyl-4-[3-(4-morpholinyl)ethoxyphenyl]- (9CI) (CA INDEX NAME)



RN 396090-87-2 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[3-(4-morpholinyl)phenyl]- (9CI) (CA INDEX NAME)

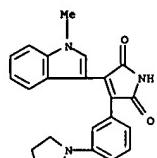


RN 396090-90-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[3-(4-morpholinyl)phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

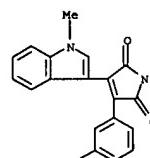


● HCl

RN 396090-91-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[3-(1-pyrrolidinyl)phenyl]- (9CI) (CA INDEX NAME)

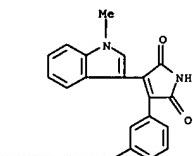


RN 396090-92-9 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[3-(3-aminopropoxy)phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



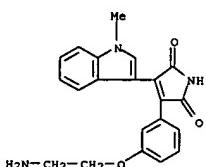
RN 396090-96-3 CAPLUS

CN 1H-Pyrrole-2,5-dione,  
3-[3-(3-aminopropoxy)phenyl]-4-(1-methyl-1H-indol-3-yl)-, monohydrochloride (9CI) (CA INDEX NAME)

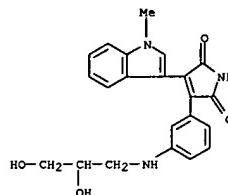


● HCl

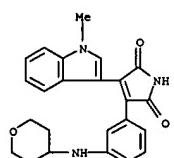
RN 396090-97-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[3-(2-aminoethoxy)phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



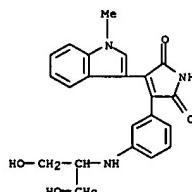
RN 396090-98-5 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[3-[(2,3-dihydroxypropyl)amino]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



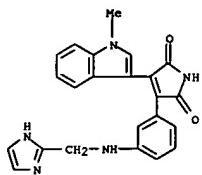
RN 396091-01-3 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[3-((tetrahydro-2H-pyran-4-yl)amino)phenyl]- (9CI) (CA INDEX NAME)



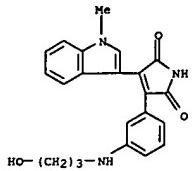
RN 396091-03-5 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[3-[(2-hydroxy-1-(hydroxymethyl)ethyl)amino]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



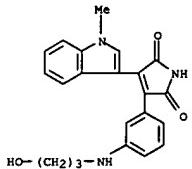
RN 396091-04-6 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[3-[(1H-imidazol-2-ylmethyl)amino]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 396091-07-9 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[3-[(3-hydroxypropyl)amino]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

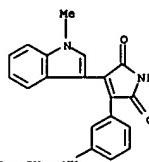


RN 396091-08-0 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[3-[(3-hydroxypropyl)amino]phenyl]-4-(1-methyl-1H-indol-3-yl)-, monohydrochloride (9CI) (CA INDEX NAME)

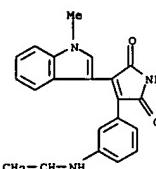


● HCl

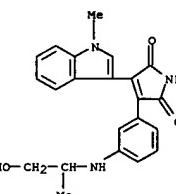
RN 396091-09-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[3-[(2-hydroxyethyl)amino]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



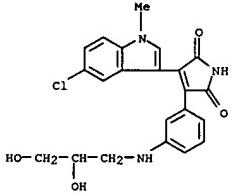
RN 396091-10-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[3-[(3-hydroxy-1-methylpropyl)amino]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



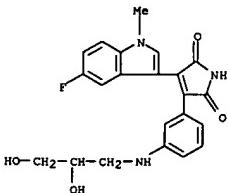
RN 396091-11-5 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[3-[(2-hydroxy-1-methylethyl)amino]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 396091-12-6 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(5-chloro-1-methyl-1H-indol-3-yl)-4-[3-[(2,3-dihydroxypropyl)amino]phenyl]- (9CI) (CA INDEX NAME)

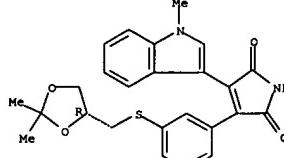


RN 396091-16-0 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[3-[(2,3-dihydroxypropyl)amino]phenyl]-4-(5-fluoro-1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



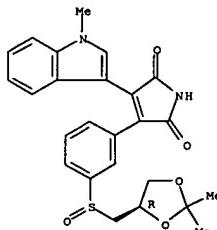
RN 396091-21-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[3-[(4R)-2,2-dimethyl-1,3-dioxolan-4-yl)methyl]thiophenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



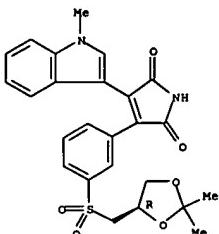
RN 396091-24-0 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[3-[(4R)-2,2-dimethyl-1,3-dioxolan-4-yl)methylsulfonyl]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



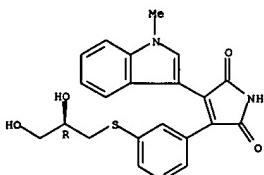
RN 396091-25-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[3-[(4R)-2,2-dimethyl-1,3-dioxolan-4-yl)methylsulfonyl]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



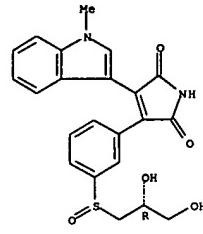
RN 396091-26-2 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[3-[(2R)-2,3-dihydroxypropyl]thio]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



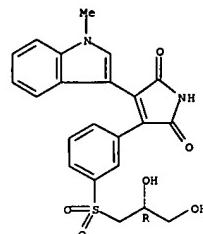
RN 396091-27-3 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[3-[(2R)-2,3-dihydroxypropyl]sulfinyl]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

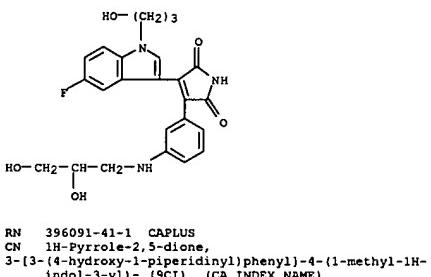


RN 396091-28-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[3-[(2R)-2,3-dihydroxypropyl]sulfonyl]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

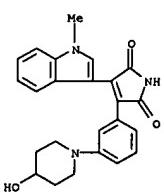
Absolute stereochemistry.



RN 396091-29-5 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[3-[(2S)-2,3-dihydroxypropyl]amino]phenyl]-4-[5-fluoro-1-(3-hydroxypropyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

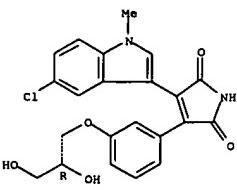


RN 396091-41-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[3-(4-hydroxy-1-piperidinyl)phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 396091-42-2 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(5-chloro-1-methyl-1H-indol-3-yl)-4-[3-((2R)-2,3-dihydroxypropoxy)phenyl]- (9CI) (CA INDEX NAME)

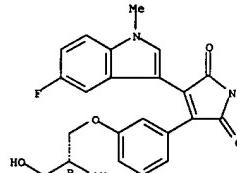
Absolute stereochemistry.



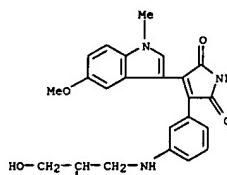
RN 396091-43-3 CAPLUS

CN 1H-Pyrrole-2,5-dione, 3-[3-[(2R)-2,3-dihydroxypropoxy]phenyl]-4-(5-fluoro-1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

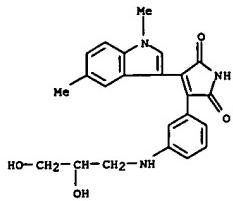
Absolute stereochemistry.



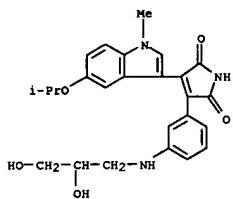
RN 396091-44-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[3-[(2,3-dihydroxypropyl)amino]phenyl]-4-(5-methoxy-1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 396091-48-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[3-((2,3-dihydroxypropyl)amino)phenyl]-4-(1,5-dimethyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

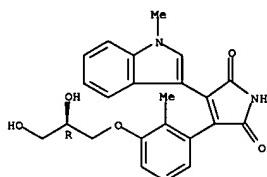


RN 396091-49-9 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[3-[(2R)-2,3-dihydroxypropoxy]amino]phenyl]-4-[1-methyl-  
5-(1-methylethoxy)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



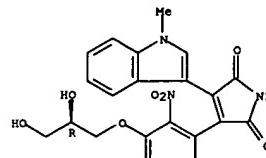
RN 396091-51-3 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[3-[(2R)-2,3-dihydroxypropoxy]-2-methylphenyl]-4-  
(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

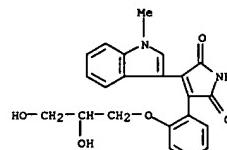


RN 396091-57-9 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[3-[(2R)-2,3-dihydroxypropoxy]-2-nitrophenyl]-4-(1-  
methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

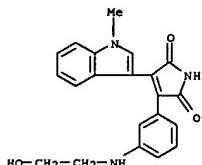
Absolute stereochemistry.



RN 396091-63-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[2-(2,3-dihydroxypropoxy)phenyl]-4-(1-methyl-1H-  
indol-3-yl)- (9CI) (CA INDEX NAME)

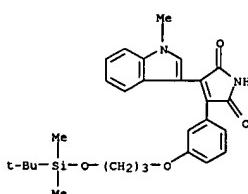


RN 396091-64-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[3-[(2-hydroxyethyl)amino]phenyl]-4-(1-methyl-1H-  
indol-3-yl)-, monohydrochloride (9CI) (CA INDEX NAME)

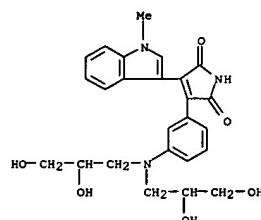


● HCl

RN 396091-65-9 CAPLUS  
CN 1H-Pyrrole-2,5-dione,  
3-[3-[(1,1-dimethylethyl)dimethylsilyloxy]propoxyphenyl]-4-(1-  
methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

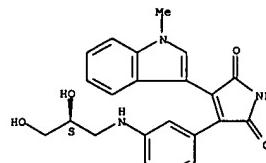


RN 396091-66-0 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[3-(bis(2,3-dihydroxypropyl)amino)phenyl]-4-(1-  
methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



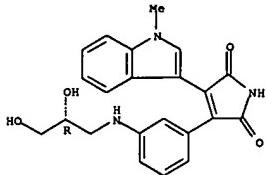
RN 396091-67-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[3-[(2S)-2,3-dihydroxypropyl]amino]phenyl]-4-(1-  
methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



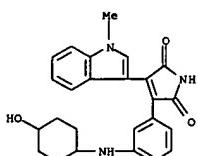
RN 396091-68-2 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[3-[(2R)-2,3-dihydroxypropyl]amino]phenyl]-4-(1-  
methyl-1H-indol-3-yl)-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

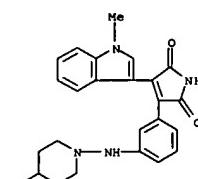


● HCl

RN 396091-69-3 CAPLUS  
 CN 1H-Pyrole-2,5-dione,  
 3-[3-[(4-hydroxycyclohexyl)amino]phenyl]-4-(1-methyl-  
 1H-indol-3-yl)- (9CI) (CA INDEX NAME)

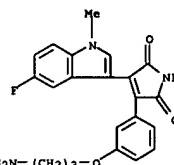


RN 396091-70-6 CAPLUS  
 CN 1H-Pyrole-2,5-dione, 3-[3-[(4-hydroxy-1-piperidinyl)amino]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



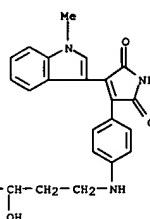
RN 396091-71-7 CAPLUS

CN 1H-Pyrole-2,5-dione,  
 3-[3-(3-aminopropoxy)phenyl]-4-(5-fluoro-1-methyl-1H-  
 indol-3-yl)-, monohydrochloride (9CI) (CA INDEX NAME)



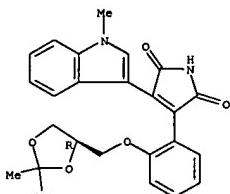
● HCl

RN 396091-72-8 CAPLUS  
 CN 1H-Pyrole-2,5-dione, 3-[4-((3-hydroxybutyl)amino)phenyl]-4-(1-methyl-1H-  
 indol-3-yl)- (9CI) (CA INDEX NAME)



IT 396090-79-2  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reactant: preparation of (indolylphenyl)-1H-pyrrolediones derivs. as  
 inhibitors of glycogen synthase kinase-3B for therapeutic agents)  
 RN 396090-79-2 CAPLUS  
 CN 1H-Pyrole-2,5-dione, 3-[2-[(4R)-2,2-dimethyl-1,3-dioxolan-4-  
 ylmethoxyphenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

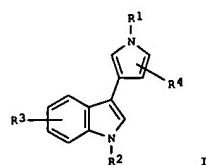


L6 ANSWER 44 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2001:747780 CAPLUS  
 DOCUMENT NUMBER: 135:303771  
 TITLE: Preparation of indolylpyrrole derivatives and cell  
 death inhibitors  
 INVENTOR(S): Asakai, Rei; Sodeoka, Mikiko; Katoh, Miho  
 PATENT ASSIGNEE(S): Sagami Chemical Research Center, Japan  
 SOURCE: PCT Int. Appl., 45 pp.  
 CODEN: PIXKD2

DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001074807	A1	20011011	WO 2001-JP2584	20010328
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 2001044596	A5	20011015	AU 2001-44596	20010328
EP 1275646	A1	20030115	EP 2001-917558	20010328
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 2003087949	A1	20030508	US 2002-239821	20020926
PRIORITY APPLN. INFO.:			JP 2000-94908	A 20000330
			WO 2001-JP2584	W 20010328

OTHER SOURCE(S): MARPAT 135:303771  
 GI



AB: Indolylpyrrole derivs. represented by the following general formula [I]: R1, R2 = H, (un)substituted alkyl, alkenyl, alkynyl, aryl, acyl, acyloxy, alkoxy carbonyl, aryloxy carbonyl, alkylthiocarbonyl, arylthiocarbonyl, aminocarbonyl, aminocarbonyloxy, alkylsulfonyl, arylsulfonyl, alkoxy, aryloxy, or amino, hydroxy; R3 = groups listed in R1 and R2, (un)substituted alkylthiocarbonyloxy, arylthiocarbonyloxy, alkylthio, or

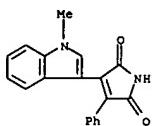
L6 ANSWER 44 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 arylthio, alkylsulfinyl, arylsulfinyl, CO<sub>2</sub>H, oxy sulfonyl, cyano, NO<sub>2</sub>, halo; R<sub>4</sub> = groups listed in R<sub>3</sub>, excluding oxy sulfonyl; or R<sub>1</sub> and R<sub>3</sub>, R<sub>1</sub> and R<sub>4</sub>, R<sub>2</sub> and R<sub>4</sub>, R<sub>3</sub> and R<sub>4</sub>, R<sub>2</sub> and R<sub>3</sub>, or two R<sub>3</sub>s or R<sub>4</sub>s together form an (un)substituted hydrocarbon chain optionally contg. heteroatoms; some provisos given are prep'd. These compds. I are useful in inhibiting cell death and expected as preventives and remedies for the progress of various diseases wherein cell death relates to the progress and worsening thereof.

Above diseases include (1) neurodegenerative diseases such as Alzheimer's disease, spinal muscular atrophy (SMA), amyotrophic lateral sclerosis (ALS), Parkinson's disease, Huntington's disease, pigmentary degeneration of the retina, glaucoma, cerebellar degeneration, (2) neonatal kernicterus, (3) cerebral ischemia and delayed neuronal death (DND) after cerebral ischemia, etc. Also claimed are cell death inhibitors, drugs, and preservatives for cells, tissues and organs which contain, as the active ingredient, these derivs. I, or pharmaceutically acceptable salts thereof. Thus, 3-(1H-indol-3-yl)-1-methyl-2,5-dioxopyrrolidine was reduced by diisobutylaluminum hydride in THF at room temp. for 2 h to give

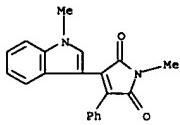
60.2% 3-(1H-indol-3-yl)-1-methylpyrrole (II). II in vitro inhibited the sodium nitroprusside-stimulated apoptosis of porcine ovarian granulosa cells (POGC) and exhibited 29% cell survival rate.

IT 125313-97-5P 327602-10-6P 365543-43-7P  
 RL: RCT (Reactant); SPC (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent); (preparation of indolylpyrrole derivs. as cell death inhibitors for treatment and prevention of progress of various diseases related to cell death)

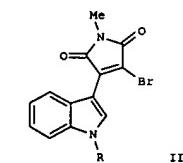
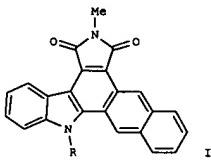
RN 125313-97-5 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-phenyl- (9CI) (CA INDEX NAME)



RN 327602-10-8 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-phenyl- (9CI) (CA INDEX NAME)



L6 ANSWER 45 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2001:674567 CAPLUS  
 DOCUMENT NUMBER: 136:85738  
 TITLE: Synthesis of naphthopyrrolo[3,4-c]carbazoles  
 AUTHOR(S): Routier, S.; Couder, G.; Merour, J.-Y.  
 CORPORATE SOURCE: Institut de Chimie Organique et Analytique, CNRS, Orleans, 45067, Fr.  
 SOURCE: Tetrahedron Letters (2001), 42(40), 7025-7028  
 CODEN: TELEAY; ISSN: 0040-4039  
 PUBLISHER: Elsevier Science Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 136:85738  
 GI



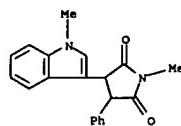
AB New naphthocarbazoles I (R = H, SO<sub>2</sub>Ph, Boc) were built from protected 3-(3-indolyl)-4-bromo-N-methylmaleimides II (R = SO<sub>2</sub>Ph, Boc) in four steps using palladium-catalyzed cross-coupling reactions such as the Suzuki reaction or 3-methoxy-2-boronic acid and intramol. Heck cyclization.

IT 386235-54-7P 386235-55-6P 386235-57-0P  
 386235-58-1P 386235-59-2P 386235-60-5P  
 386235-61-6P

RL: RCT (Reactant); SPC (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent); (synthesis of naphthopyrrolo[3,4-c]carbazoles)

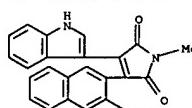
RN 386235-54-7 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-(3-methoxy-2-naphthalenyl)-1-methyl- (9CI) (CA INDEX NAME)

L6 ANSWER 44 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 RN 365543-43-7 CAPLUS  
 CN 2,5-Pyrrolidinedione, 1-methyl-3-(1-methyl-1H-indol-3-yl)-4-phenyl- (9CI) (CA INDEX NAME)

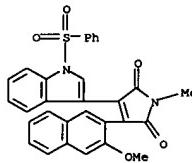


REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

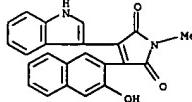
L6 ANSWER 45 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



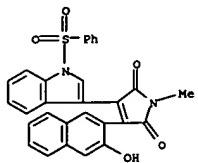
RN 386235-55-8 CAPLUS  
 CN 1H-Indole,  
 3-[2,5-dihydro-4-(3-methoxy-2-naphthalenyl)-1-methyl-2,5-dioxo-1H-pyrrol-3-yl]-1-(phenylsulfonyl)- (9CI) (CA INDEX NAME)



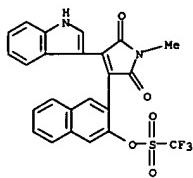
RN 386235-57-0 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(3-hydroxy-2-naphthalenyl)-4-(1H-indol-3-yl)-1-methyl- (9CI) (CA INDEX NAME)



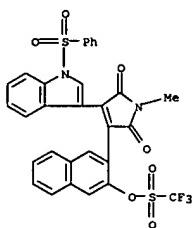
RN 386235-58-1 CAPLUS  
 CN 1H-Indole,  
 3-[2,5-dihydro-4-(3-hydroxy-2-naphthalenyl)-1-methyl-2,5-dioxo-1H-pyrrol-3-yl]-1-(phenylsulfonyl)- (9CI) (CA INDEX NAME)



RN 386235-59-2 CAPLUS  
CN Methanesulfonic acid, trifluoro-, 3-[2,5-dihydro-4-(1H-indol-3-yl)-1-methyl-2,5-dioxo-1H-pyrrol-3-yl]-2-naphthalenyl ester (9CI) (CA INDEX NAME)

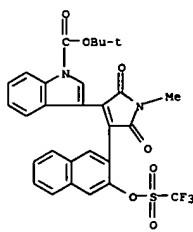


RN 386235-60-5 CAPLUS  
CN Methanesulfonic acid, trifluoro-, 3-[2,5-dihydro-1-methyl-2,5-dioxo-4-[1-(phenylsulfonyl)-1H-indol-3-yl]-1H-pyrrol-3-yl]-2-naphthalenyl ester (9CI) (CA INDEX NAME)

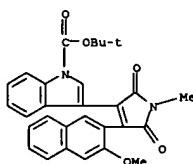


RN 386235-61-6 CAPLUS

L6 ANSWER 45 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
CN 1H-Indole-1-carboxylic acid, 3-[2,5-dihydro-1-methyl-2,5-dioxo-4-(3-[(trifluoromethyl)sulfonyl]oxy)-2-naphthalenyl]-1H-pyrrol-3-yl]-1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



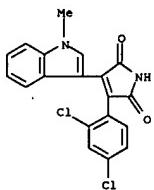
IT 386235-56-9  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(synthesis of naphthopyrrolo[3,4-c]carbazoles)  
RN 386235-56-9 CAPLUS  
CN 1H-Indole-1-carboxylic acid,  
3-[2,5-dihydro-4-(3-methoxy-2-naphthalenyl)-1-methyl-2,5-dioxo-1H-pyrrol-3-yl]-1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

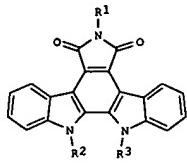
L6 ANSWER 46 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2001:490373 CAPLUS  
DOCUMENT NUMBER: 135:298585  
TITLE: Inhibition of GSK-3 selectively reduces glucose-6-phosphatase and phosphoenolpyruvate carboxykinase gene expression  
AUTHOR(S): Lochhead, Pamela A.; Coghlan, Matthew; Rice, Simon Q. J.; Sutherland, Calum  
CORPORATE SOURCE: Division of Cell Signalling, School of Life Sciences, University of Dundee, Dundee, DD1 5EH, UK  
SOURCE: Diabetes (2001), 50(5), 937-946  
CODEN: DIAEAZ; ISSN: 0012-1797  
PUBLISHER: American Diabetes Association  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB A major action of insulin is to regulate the transcription rate of specific genes. The expression of these genes is dramatically altered in type 2 diabetes. For example, the expression of two hepatic genes, glucose-6-phosphatase and PEPCK, is normally inhibited by insulin, but in type 2 diabetes, their expression is insensitive to insulin. An agent that mimics the effect of insulin on the expression of these genes would reduce gluconeogenesis and hepatic glucose output, even in the presence of insulin resistance. The repressive actions of insulin on these genes are dependent on phosphatidylinositol (PI) 3-kinase. However, the mols. that lie between this lipid kinase and the two gene promoters are unknown. Glycogen synthase kinase-3 (GSK-3) is inhibited following activation of PI 3-kinase and protein kinase B. In hepatoma cells, the authors find that selectively reducing GSK-3 activity strongly reduces the expression of both gluconeogenic genes. The effect is at the level of transcription and is observed with induced or basal gene expression. In addition, GSK-3 inhibition does not result in the subsequent activation of protein kinase B or inhibition of the transcription factor FKHR, which are candidate regulatory mols. for these promoters. Thus, GSK-3 activity is required for basal activity of each promoter. Inhibitors of GSK-3 should therefore reduce hepatic glucose output, as well as increase the synthesis of glycogen from L-glucose. These findings indicate that GSK-3 inhibitors may have greater therapeutic potential for lowering blood glucose levels and treating type 2 diabetes than previously realized.  
IT 280744-09-4, SB-216763  
RL: BAC (Biological activity or effector, except adverse); BSI  
(Biological study, unclassified); BIOL (Biological study)  
(inhibition of GSK-3 (glycogen synthase kinase-3) selectively reduces glucose phosphatase and phosphoenolpyruvate carboxykinase gene expression in relation to insulin resistance and treating type 2 diabetes)  
RN 280744-09-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)-(9CI) (CA INDEX NAME)

L6 ANSWER 46 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



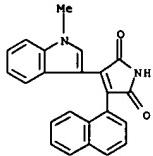
REFERENCE COUNT: 68 THERE ARE 68 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 47 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2001:292783 CAPLUS  
 DOCUMENT NUMBER: 135:122654  
 TITLE: Phenyliodine(III) bis(trifluoroacetate)-mediated oxidation of bisindolylmaleimides to indolo[2,3-a]carbazoles  
 AUTHOR(S): Faul, M. M.; Sullivan, K. A.  
 CORPORATE SOURCE: Chemical Process Research and Development Division, Lilly Research Laboratories, A Division of Eli Lilly and Company, Indianapolis, IN, 46285, USA  
 SOURCE: Tetrahedron Letters (2001), 42(19), 3271-3273  
 PUBLISHER: Elsevier Science Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CODEN: TELEAY; ISSN: 0040-4039  
 GI



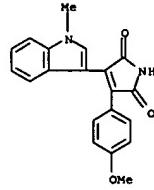
I

AB A novel protocol for the oxidation of bisindolylmaleimides to the corresponding indolo[2,3-a]carbazoles (I) in 15-56% yield with phenyliodine(III) bis(trifluoroacetate) (PIFA) is reported.  
 IT 125313-42-0 125313-98-6  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (failed PIFA-mediated oxidation)  
 RN 125313-42-0 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-(1-naphthalenyl)-(9CI)  
 (CA INDEX NAME)



RN 125313-98-6 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(4-methoxyphenyl)-4-(1-methyl-1H-indol-3-yl)-(9CI) (CA INDEX NAME)

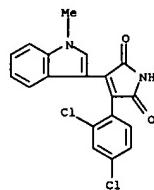
L6 ANSWER 47 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L6 ANSWER 48 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2001:266655 CAPLUS  
 DOCUMENT NUMBER: 135:87082  
 TITLE: Selective small-molecule inhibitors of glycogen synthase kinase-3 activity protect primary neurons from death  
 AUTHOR(S): Cross, Darren A. E.; Culbert, Ainsley A.; Chalmers, Katy A.; Facci, Laura; Skaper, Stephen D.; Reith, Alastair D.  
 CORPORATE SOURCE: Neurology Centre of Excellence in Drug Discovery, GlaxoSmithKline Pharmaceuticals, Essex, CM19 5AW, UK  
 SOURCE: Journal of Neurochemistry (2001), 77(1), 94-102  
 CODEN: JONRA9; ISSN: 0022-3042  
 PUBLISHER: Blackwell Science Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB The phosphatidylinositol 3-kinase (PI 3-kinase)/protein kinase B (PKB; also known as Akt) signaling pathway is recognized as playing a central role in the survival of diverse cell types. Glycogen synthase kinase-3 (GSK-3) is a ubiquitously expressed serine/threonine protein kinase that is one of several known substrates of PKB. PKB phosphorylates GSK-3 in response to insulin and growth factors, which inhibits GSK-3 activity and leads to the modulation of multiple GSK-3 regulated cellular processes. We show that the novel potent and selective small-mol. inhibitors of GSK-3; SB-415286 and SB-216763, protect both central and peripheral nervous system neurons in culture from death induced by reduced PI 3-kinase pathway activity. The inhibition of neuronal death mediated by these compds. correlated with inhibition of GSK-3 activity and modulation of GSK-3 substrates tau and  $\beta$ -catenin. Thus, in addition to the previously assigned roles of GSK-3, our data provide clear pharmacol. and biochemical evidence that selective inhibition of the endogenous pool of GSK-3 activity in primary neurons is sufficient to prevent death, implicating GSK-3 as a physiol. relevant principal regulatory target of the PI 3-kinase/PKB neuronal survival pathway.  
 IT 280744-09-4, SB 216763  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (selective small-mol. inhibitors of glycogen synthase kinase-3 activity protect primary neurons from death)  
 RN 280744-09-4 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)-(9CI) (CA INDEX NAME)

L6 ANSWER 48 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

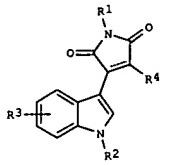
L6 ANSWER 49 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2001:152487 CAPLUS  
 DOCUMENT NUMBER: 134:193340

TITLE: Preparation of (3-indolyl)maleimide and -succinimide derivatives as apoptosis inhibitors and drugs containing them for inhibiting apoptosis  
 INVENTOR(S): Asakai, Rei; Sodeoka, Mikiko; Fujita, Mikako; Katcho, Miho  
 PATENT ASSIGNEE(S): Sagami Chemical Research Center, Japan  
 SOURCE: PCT Int. Appl., 43 pp.  
 CODEN: PIIXD2

DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001013916	A1	20010301	WO 2000-JP5496	20000817
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JS, KB, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MN, MW, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GR, KE, LS, MW, MZ, SD, SL, SZ, TZ, UC, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, HL, MR, NE, SN, TD, TG				
AU 2000065936	A5	20010319	AU 2000-65936	20000817
EP 1224932	A1	20020724	EP 2000-953455	20000817
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
PRIORITY APPLN. INFO.: JP 1999-233465 A 19990820				
		WO 2000-JP5496		W 20000817

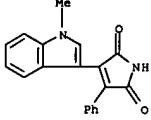
OTHER SOURCE(S): MARPAT 134:193340  
 GI



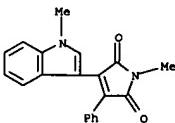
AB Described are apoptosis (cell death) inhibitors, drugs, and preservatives for cells, tissues and organs which contain as the active ingredient indolymaleimide derivs. represented by general formula [I]; R1 = (un)substituted alkyl, alkenyl, or aryl, HO, (un)substituted alkoxy, aryl,

aryl,

L6 ANSWER 49 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



IT 327602-10-8P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of (3-indolyl)maleimide and -succinimide derivs. as apoptosis inhibitors for preventives and remedies for various diseases)  
 RN 327602-10-8 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 1-methyl-3-(1-methyl-1H-indol-3-yl)-4-phenyl- (9CI) (CA INDEX NAME)



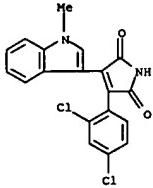
REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 49 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 ACCESSION NUMBER: 2000:801145 CAPLUS  
 DOCUMENT NUMBER: 134:112113  
 TITLE: Selective small molecule inhibitors of glycogen synthase kinase-3 modulate glycogen metabolism and gene transcription

AUTHOR(S): Coghlan, Matthew P.; Culbert, Ainsley A.; Cross, Darren A. E.; Corcoran, Stacey L.; Yates, John W.; Pearce, Nigel J.; Rausch, Oliver L.; Murphy, Gregory J.; Carter, Paul S.; Cox, Lynne Roxbee; Mills, David; Brown, Murray J.; Haigh, David; Ward, Robert W.; Smith, David G.; Murray, Kenneth J.; Reith, Alastair D.; Holder, Julie C.

CORPORATE SOURCE: Department of Vascular Biology, SmithKline Beecham Pharmaceuticals, Essex, CM19 5AD, UK  
 SOURCE: Chemistry & Biology (2000), 7(10), 793-803  
 PUBLISHER: Elsevier Science Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Background: Glycogen synthase kinase-3 (GSK-3) is a serine/threonine protein kinase, the activity of which is inhibited by a variety of extracellular stimuli including insulin, growth factors, cell specification factors and cell adhesion. Consequently, inhibition of GSK-3 activity has been proposed to play a role in the regulation of numerous signaling pathways that elicit pleiotropic cellular responses. This report describes the identification and characterization of potent and selective small mol. inhibitors of GSK-3. Results: SB-216763 and SB-415286 are structurally distinct maleimides that inhibit GSK-3 $\alpha$  in vitro, with IC<sub>50</sub>s of 9 nM and 31 nM resp., in an ATP competitive manner. These compds. inhibited GSK-3 $\beta$  with similar potency. However, neither compound significantly inhibited any member of a panel of 24 other protein kinases. Furthermore, treatment of cells with either compound stimulated responses characteristic of extracellular stimuli that are known to inhibit GSK-3 activity. Thus, SB-216763 and SB-415286 stimulated glycogen synthesis in human liver cells and induced expression of a  $\beta$ -catenin-LEF/TCF regulated reporter gene in HEK293 cells. In both cases, compound treatment was demonstrated to inhibit cellular GSK-3 activity as assessed by activation of glycogen synthase, which is a direct target of this kinase. Conclusions: SB-216763 and SB-415286 are novel, potent and selective cell permeable inhibitors of GSK-3. Therefore, these compds. represent valuable pharmacol. tools with which the role of GSK-3 in cellular signaling can be further elucidated. Furthermore, development of similar compds. may be of use therapeutically in disease states associated with elevated GSK-3 activity such as non-insulin dependent diabetes mellitus and neurodegenerative disease.

IT 280744-09-4, SB 216763  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
 (selective small mol. maleimide inhibitors of glycogen synthase kinase-3 modulate glycogen metabolism and gene transcription)  
 RN 280744-09-4 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)-(9CI) (CA INDEX NAME)

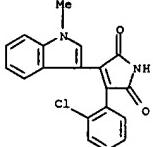


REFERENCE COUNT: 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

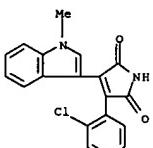
L6 ANSWER 51 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2000:456876 CAPLUS  
 DOCUMENT NUMBER: 133:84297  
 TITLE: Maleimide and carbazole derivatives for the treatment of conditions with a need for the inhibition of glycogen synthase kinase-3 (GSK-3)  
 INVENTOR(S): Coglan, Matthew Paul; Holder, Julie Caroline; Reith, Alastair David; Smith, David Glynn  
 PATENT ASSIGNEE(S): Smithkline Beecham PLC, UK  
 SOURCE: PCT Int. Appl., 28 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000038675	A1	20000706	WO 1999-GB4374	19991222
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, LZ, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1140070	A1	20011010	EP 1999-962419	19991222
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRIORITY APPLN. INFO.:			GB 1998-28640	A 19981223
			WO 1999-GB4374	W 19991222

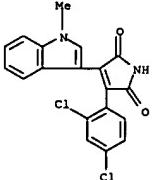
OTHER SOURCE(S): MARPAT 133:84297  
 AB A method of treatment and/or prophylaxis of conditions associated with a need for the inhibition of GSK-3 comprises the administration of certain maleimide or carbazole compds., or pharmaceutically acceptable derivs. thereof. Also provided is the use of such compds. in the manufacture of a medicament for the treatment of conditions associated with the need for GSK-3 inhibition.  
 IT 125314-07-0 125314-07-0D, derivs. 280744-09-4  
 280744-09-4D, derivs. 280744-10-7 280744-10-7D  
 , derivs. 280744-11-8 280744-11-8D, derivs.  
 RLU: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (maleimide and carbazole derivs. for treatment of conditions with need for inhibition of glycogen synthase kinase-3)  
 RN 125314-07-0 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(2-chlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI)  
 (CA INDEX NAME)



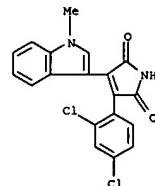
RN 125314-07-0 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(2-chlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



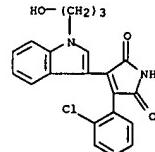
RN 280744-09-4 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



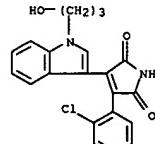
RN 280744-09-4 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



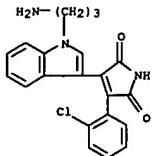
RN 280744-10-7 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(2-chlorophenyl)-4-[1-(3-hydroxypropyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



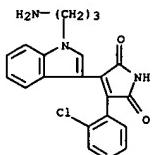
RN 280744-10-7 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(2-chlorophenyl)-4-[1-(3-hydroxypropyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



RN 280744-11-8 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-[1-(3-aminopropyl)-1H-indol-3-yl]-4-(2-chlorophenyl)- (9CI) (CA INDEX NAME)

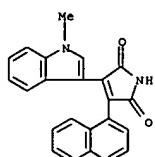


RN 280744-11-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-{1-(3-aminopropyl)-1H-indol-3-yl}-4-(2-chlorophenyl)- (9CI) (CA INDEX NAME)

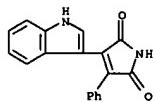


REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

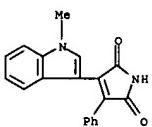
L6 ANSWER 52 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1999-83376 CAPLUS  
DOCUMENT NUMBER: 130:237430  
TITLE: A new one step synthesis of maleimides by condensation of glyoxylate esters with acetamides  
AUTHOR(S): Paul, Margaret M.; Winneroski, Leonard L.; Krumrich, Christine A.  
CORPORATE SOURCE: Chemical Process Research and Development Division, Lilly Research Laboratories, A Division of Eli Lilly and Company, Indianapolis, IN, 46285-4813, USA  
SOURCE: Tetrahedron Letters (1999), 40(6), 1109-1112  
PUBLISHER: Elsevier Science Ltd.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 130:237430  
AB Di-Ph, bis(heteroaryl, (indolyl)aryl and indolyl(cycloalkyl) maleimides are prepared in one step and 67-99% yield by condensation of glyoxylate esters with acetamides using a 1.0 M solution of potassium tert-butoxide in THF. The mechanism of the reaction is discussed.  
IT 125313-42-0P 125313-57-7P 125313-97-5P  
125313-98-6P 150114-23-1P 221233-35-8P  
221233-43-8P 221233-51-8P 221233-73-4P  
RL: SRN (Synthetic preparation); PREP (Preparation)  
(preparation of maleimides by condensation of glyoxylate esters with acetamides)  
RN 125313-42-0 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-(1-naphthalenyl)- (9CI) (CA INDEX NAME)



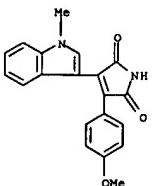
RN 125313-57-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-phenyl- (9CI) (CA INDEX NAME)



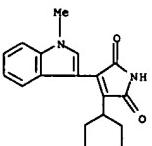
L6 ANSWER 52 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
RN 125313-97-5 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-phenyl- (9CI) (CA INDEX NAME)



RN 125313-98-6 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(4-methoxyphenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

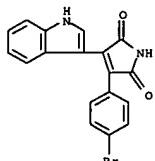


RN 150114-23-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-cyclohexyl-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

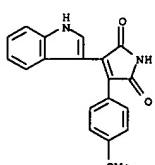


RN 221233-35-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(4-bromophenyl)-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)

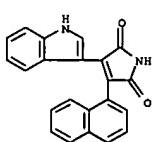
L6 ANSWER 52 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



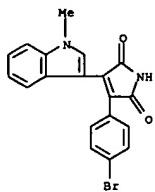
RN 221233-43-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 221233-51-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-(1-naphthalenyl)- (9CI) (CA INDEX NAME)

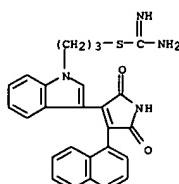


RN 221233-73-4 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(4-bromophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



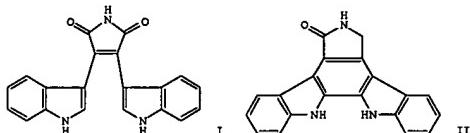
REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

ACCESSION NUMBER: 1995:338467 CAPLUS  
 DOCUMENT NUMBER: 122:150861  
 TITLE: 2-Aryl-indolyl maleimides - novel and potent inhibitors of protein kinase C  
 AUTHOR(S): Hendrick, Robert T.; Sherman, D.; Strulovici, Berta; Broka, Chris A.  
 CORPORATE SOURCE: Inst. Org. Chem., Syntex Discovery Res., Palo Alto, CA, 94304, USA  
 SOURCE: Bioorganic & Medicinal Chemistry Letters (1995), 5(1), 67-72  
 PUBLISHER: Elsevier  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB A new class of protein kinase C (PKC) inhibitors is described. These inhibitors were derived from the familiar bis-indolyl maleimide series of inhibitors through a structural rearrangement involving transfer of one aryl ring from the maleimide moiety to the C-2 position of the indole ring remaining attached to that moiety. The resulting compds. are among the most potent known inhibitors of PKC and also show good selectivity for PKC in relation to other kinases. The lead compound in this series possesses antitumor activity in several *in vitro* and *in vivo* models.  
 IT 161404-52-0  
 RL: RAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PPR (Properties); BIOL (Biological study) (preparation of arylindolyl maleimides as novel and potent inhibitors of protein kinase C in relation to antitumor activity)  
 RN 161404-52-0 CAPLUS  
 CN Carbamimidothioic acid, 3-(3-(2,5-dihydro-4-(1-naphthalenyl)-2,5-dioxo-1H-pyrrol-3-yl)-1H-indol-1-yl)propyl ester, monohydrobromide (9CI) (CA INDEX NAME)

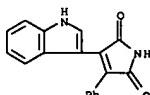


● HBr

ACCESSION NUMBER: 1994:244431 CAPLUS  
 DOCUMENT NUMBER: 120:244431  
 TITLE: Oxidative cyclizations with palladium acetate. A short synthesis of staurosporine aglycon  
 AUTHOR(S): Harris, William; Hill, Christopher H.; Keech, Elizabeth; Malsher, Patrick  
 CORPORATE SOURCE: Res. Cent., Roche Prod. Ltd., Welwyn Garden City/Herts., AL7 3AV, UK  
 SOURCE: Tetrahedron Letters (1993), 34(51), 8361-4  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 120:244431  
 GI

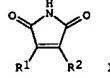


AB A palladium acetate mediated oxidative cyclization of arcyriarubin A I has been used as the key step for the syntheses of staurosporine aglycon II and related analogs.  
 IT 125313-57-7  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (intramol. palladium acetate oxidative cyclocondensation of)  
 RN 125313-57-7 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-phenyl- (9CI) (CA INDEX NAME)



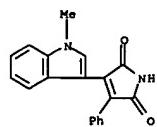
L6 ANSWER 55 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1993:560093 CAPLUS  
 DOCUMENT NUMBER: 119:160093  
 TITLE: Preparation of substituted maleimides  
 INVENTOR(S): Hill, Christopher Huw  
 PATENT ASSIGNEE(S): Hoffmann-La Roche, F., und Co. A.-G., Switz.  
 SOURCE: Eur. Pat. Appl., 14 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:  
 PRIORITY APPLN. INFO.: 1992-118164  
 PATENT NO. KIND DATE APPLICATION NO. DATE  
 EP 540956 A1 19930512 EP 1992-118164 19921023  
 EP 540956 B1 19970903 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT,  
 SE AT 157664 E 19970915 AT 1992-118164 19921023  
 ES 2107487 T3 19971201 ES 1992-118164 19921023  
 ZA 9208340 A 19930504 ZA 1992-8340 19921028  
 AU 927419 A1 19930506 AU 1992-27419 19921029  
 AU 658017 B2 19950330 19921029  
 CA 2081805 AA 19930505 CA 1992-2081805 19921030  
 CA 2081805 C 19930121A 19921030  
 JP 52-21977 A2 19930831 JP 1992-317907 19921102  
 JP 2793271 B2 19980917 19921102  
 CN 1072409 A 19930526 CN 1992-112704 19921103  
 CN 1041308 B 19981223 19921103  
 US 5399712 A 19950321 US 1992-971370 19921104  
 GB 1991-23396 A 19911104

OTHER SOURCE(S): CASREACT 119:160093; MARPAT 119:160093  
 GI

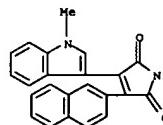


AB Title compds. [I]: R1 = alkyl, (hetero)aryl; R2 = H, alkyl, alkoxy carbonyl, (hetero)aryl were prepared by cyclocondensation of R1COCOX (X = leaning group) with R2CH2C(:NH)YR3 (R3 = alkyl, aryl, trialkylsilyl; Y = O, S) followed by hydrolysis and dehydration steps in a 1-pot process. Thus, R1COCOC1 (R1 = 1,2-dimethyl-3-indolyl) was stirred 18 h with R2CH2C(:NH)OCHMe2 (R2 = 1-methyl-3-indolyl) (preparation given) in CH2Cl2 containing ET3N and 4Å mol. sieves after which MeC6H4SO3H was added and stirring continued 1 h to give 70% I (R1 and R2 herein given).  
 IT 125313-97-5P 137467-10-8P 150114-23-1P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, method for)  
 RN 125313-97-5 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-phenyl- (9CI) (CA INDEX NAME)

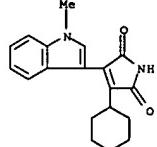
L6 ANSWER 55 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 INDEX NAME)



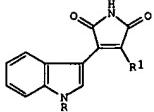
RN 137467-10-8 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-(2-naphthalenyl)- (9CI) (CA INDEX NAME)



RN 150114-23-1 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-cyclohexyl-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

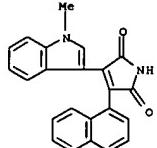


L6 ANSWER 56 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1992:41230 CAPLUS  
 DOCUMENT NUMBER: 116:41230  
 TITLE: Inhibitors of protein kinase C. 1.  
 AUTHOR(S): Davis, Peter D.; Hill, Christopher H.; Lawton, Geoffrey; Nixon, John S.; Wilkinson, Sandra E.; Hurst, Steven A.; Keech, Elizabeth; Turner, Susan E.  
 CORPORATE SOURCE: Roche Prod. Ltd., Welwyn Garden City/Herts., AL7 3AY, UK  
 SOURCE: Journal of Medicinal Chemistry (1992), 35(1), 177-84  
 DOCUMENT TYPE: CODEN: JMCWAR; ISSN: 0022-2623  
 LANGUAGE: Journal  
 English  
 GI

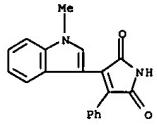


AB A series of novel inhibitors, i.e., maleimides I (R = H, Me; R1 = (un)substituted indolyl, (un)substituted Ph, naphthyl, benzo[b]thien-3-yl, benzo[b]furan-3-yl, 3-pyrrolyl) of protein kinase C (PKC) is described. These maleimides were derived from the structural lead provided by the indolocarbazoles, staurosporine and K252a. Optimum activity required the imide NH, both carbonyl groups, and the olefinic bond of the maleimide ring. Bisindolylmaleimides were the most active and the potency of these was improved by a chloro substituent at the 5-position of one indole ring (IC50 0.11 μM). In a series of (phenylindolyl)maleimides, nitro derivative I (R = Me, R1 = 2-O2NC6H5) was most active (IC50 0.67 μM). Naphthalene compound I (R = Me, R1 = 1-naphthyl) and benzothiphene compound I (R = Me, R2 = benzo[b]thien-3-yl) showed greater than 100-fold selectivity for inhibition of PKC over the closely related cAMP-dependent protein kinase. IT 125313-42-0P 125313-97-5P 125313-98-6P  
 125313-99-7P 125314-00-3P 125314-01-4P  
 125314-02-5P 125314-03-6P 125314-04-7P  
 125314-05-8P 125314-06-9P 125314-07-0P  
 125314-08-1P 125314-09-2P 125314-13-8P  
 125314-16-1P 125314-20-7P 125314-21-8P  
 125314-22-9P 125334-49-7P 125334-49-8P  
 137467-10-8P 137467-15-3P 137467-16-4P  
 137467-17-5P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and protein kinase C inhibiting activity of)  
 RN 125313-42-0 CAPLUS  
 CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-(1-naphthalenyl)- (9CI) (CA INDEX NAME)

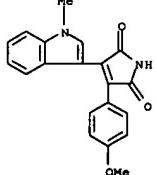
L6 ANSWER 56 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



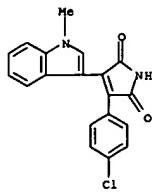
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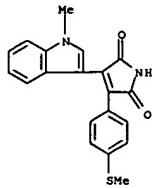
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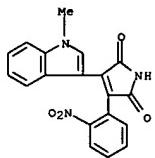
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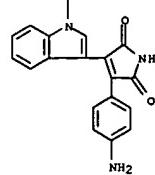
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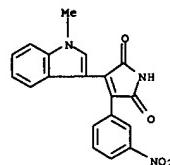
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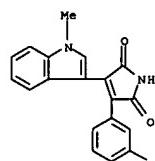
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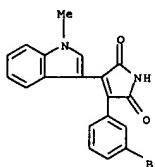
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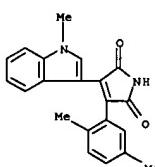
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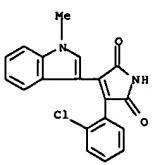
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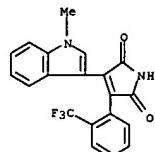
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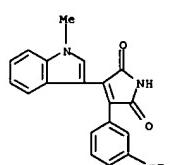
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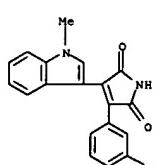
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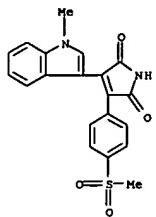
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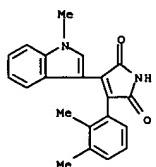
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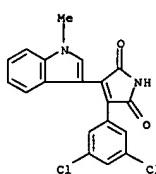
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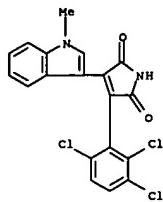
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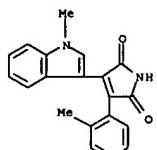
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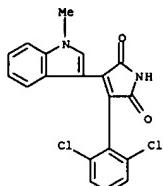
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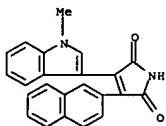
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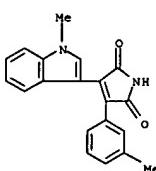
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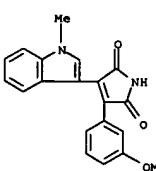
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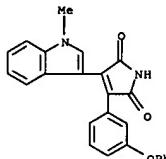
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ACCESSION NUMBER: 1990:98378 CAPLUS

DOCUMENT NUMBER: 112:98378

TITLE: Preparation of 3-(3-indolyl)pyrrole-2,5-diones and

analog as protein kinase inhibitors

INVENTOR(S): Davis, Peter David; Hill, Christopher Huw; Lawton,

Geoffrey

PATENT ASSIGNEE(S): Hoffmann-La Roche, F., und Co. A.-G., Switz.

SOURCE: Eur. Pat. Appl., 38 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

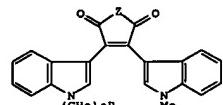
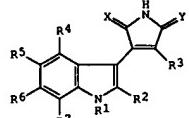
LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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EP 328026	B1	19930428		
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CZ 280738	B6	19960417	CZ 1989-752	19890203
SK 278889	B6	19980506	SK 1989-752	19890203
AU 8922658	A1	19890810	AU 1989-29658	19890206
AU 623630	B2	19920521		
HU 49349	A2	19890928	HU 1989-554	19890206
HU 201054	B	19900928		
US 5057614	A	19911015	US 1989-307104	19890206
AT 88704	E	19930515	AT 1989-102025	19890206
CA 1320394	A1	19930713	CA 1989-550178	19890206
ES 2054890	T3	19940816	ES 1989-102025	19890206
DK 890558	A	19890811	DK 1989-538	19890207
DK 71891	B1	19970804		
JP 01233281	A2	19890919	JP 1989-27741	19890208
JP 07030071	B4	19950405		
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NO 172540	B	19930426		
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FI 96861	B	19960531		
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US 36736	E	20000613	US 1998-14198	19980127
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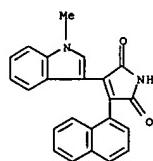


AB The title compds. (I; R1, R2 = H, alkyl, aryl, etc.; R3 = aryl, heteroaryl; R4-R7 = H, halo, alkyl, alkoxy, etc.; 1 of X, Y = O and the other = S, N, H and OH, H and H) were prepared. Thus, 1-(3-bromopropyl)indole (preparation given) was stirred 2 h with (COCl)<sub>2</sub> in CH<sub>2</sub>Cl<sub>2</sub> and the product stirred 3 h with 1-methyl-3-indolylacetic acid in CH<sub>2</sub>Cl<sub>2</sub> containing (Me<sub>2</sub>CH)<sub>2</sub>NET to give bis(indolyl)furanone II (R = Br, Z = O) which was converted in 3 steps to II (R = NH<sub>2</sub>, Z = NH). The latter was stirred 16 h with 1,1'-thiocarbonyldimidazole in THF to give II (R = NCS, Z = NH) which had IC<sub>50</sub> of 0.008  $\mu$ M for inhibition of protein kinase C in vitro.

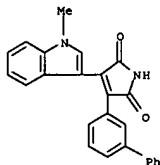
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RL: SRN (Synthetic preparation): PREP (Preparation)  
(preparation of ... as protein kinase inhibitor)

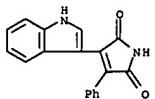
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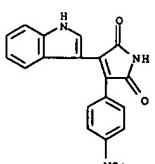
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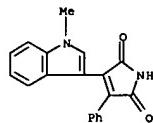
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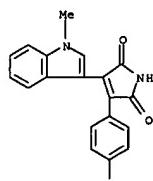
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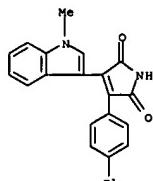
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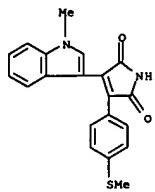
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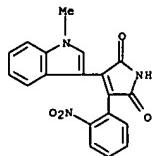
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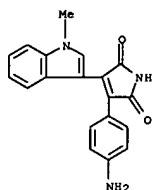
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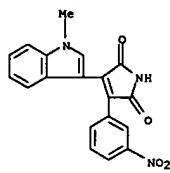
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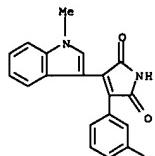
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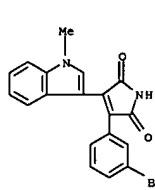
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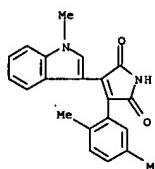
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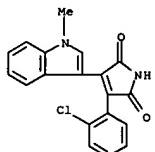
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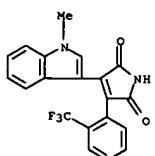
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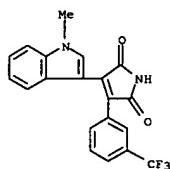
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(CA INDEX NAME)



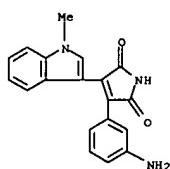
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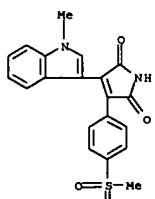
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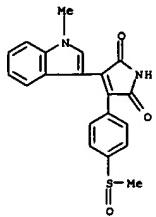
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(CA INDEX NAME)



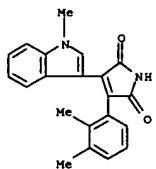
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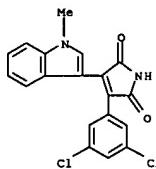
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(CA INDEX NAME)



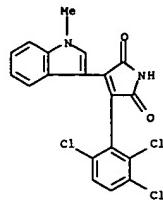
RN 125314-20-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(2,3-dimethylphenyl)-4-(1-methyl-1H-indol-3-yl)-(9CI) (CA INDEX NAME)



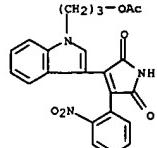
RN 125314-21-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(3,5-dimethylphenyl)-4-(1-methyl-1H-indol-3-yl)-(9CI) (CA INDEX NAME)



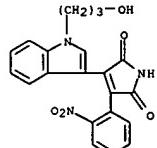
RN 125314-22-9 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-(2,3,6-trichlorophenyl)-(9CI) (CA INDEX NAME)



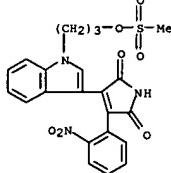
RN 125314-32-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[1-(3-(acetyloxy)propyl)-1H-indol-3-yl]-4-(2-nitrophenyl)-(9CI) (CA INDEX NAME)



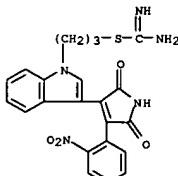
RN 125314-33-2 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[1-(3-hydroxypropyl)-1H-indol-3-yl]-4-(2-nitrophenyl)-(9CI) (CA INDEX NAME)



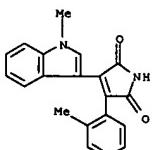
RN 125314-40-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[1-(3-((methylsulfonyl)oxy)propyl)-1H-indol-3-yl]-4-(2-nitrophenyl)-(9CI) (CA INDEX NAME)



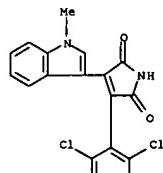
RN 125314-41-2 CAPLUS  
CN Carbamimidothioic acid, 3-[3-(2,5-dihydro-4-(2-nitrophenyl)-2,5-dioxo-1H-pyrrol-3-yl)-1H-indol-1-yl]propyl ester (9CI) (CA INDEX NAME)



RN 125334-46-7 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-(2-methylphenyl)-(9CI) (CA INDEX NAME)



RN 125334-49-8 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-(2,6-dimethylphenyl)-4-(1-methyl-1H-indol-3-yl)-(9CI) (CA INDEX NAME)



RN 125314-32-1 CAPLUS  
CN 1H-Pyrrole-2,5-dione, 3-[1-(3-(acetyloxy)propyl)-1H-indol-3-yl]-4-(2-nitrophenyl)-(9CI) (CA INDEX NAME)

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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	292.19	601.20
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-42.75	-42.75

STN INTERNATIONAL LOGOFF AT 11:02:37 ON 27 FEB 2006